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Veterinary Specifics,

FOR THE CURE OF

Horses, Cattle, Sheep, Dogs, Hogs and Poultry.

That the diseases of domestic animals are cured by **Humphreys' Homœopathic Veterinary Specifics**, is as true as that people ride on railroads, send messages by telegraph, or sew with sewing machines. **Used for twenty years with perfect success.**

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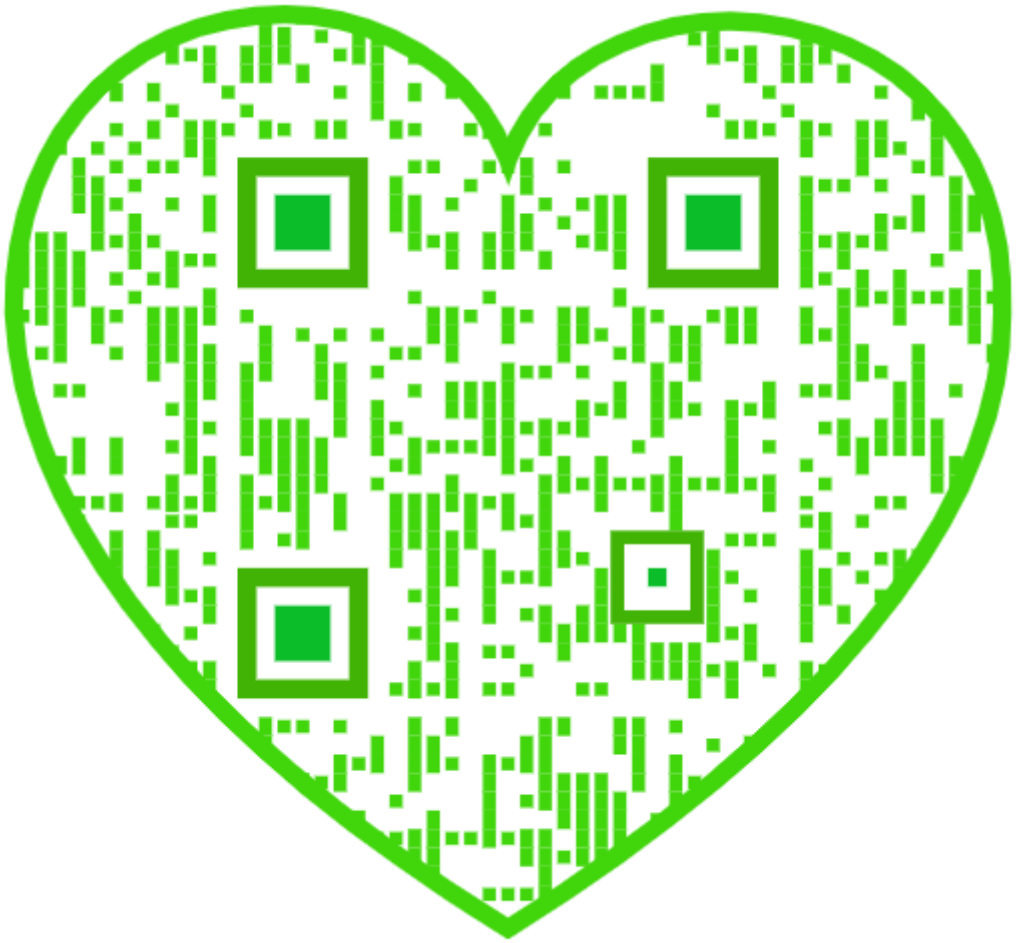

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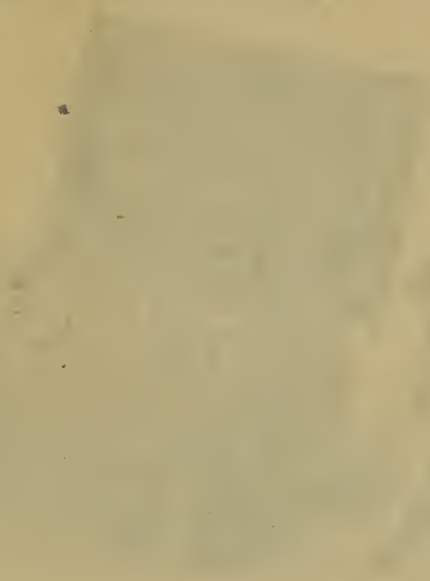
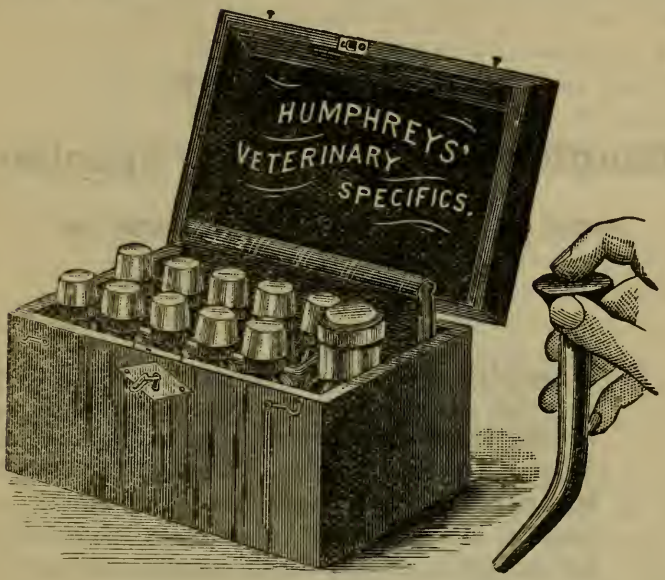


HUMPHREYS' VETERINARY SPECIFICS.



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ADVANTAGES OF

Humphreys' Veterinary Specifics

OVER ANY OTHER SYSTEM, OR MODE OF TREATMENT FOR STOCK.

I.—**Humphreys' Veterinary Specifics, are not an experiment.** They have been in use among FARMERS, BREEDERS, LIVERY STABLE and TURFMEN, HORSE RAILROAD, EXPRESS, MINING and MANUFACTURING COMPANIES, MENAGERIES and HIPPODROMES, and others handling large numbers of horses and other stock with complete success for over thirty years.

II.—**You have a Specific Remedy for any particular Disease or Complaint. For Colic,** or **Cough,** or **Founder,** or **Heaves,** or **Pneumonia,** or **Indigestion,** or **Disease of the Kidneys,** or **Urinary Passages, Strains,** or **Lameness,** you have in **compact, portable form,** the **Specific** to cure it. You know just **what** to do, and **how** to do it.

III.—**Their use is free from danger to the Animal.** In the usual treatment, the medicines are either rank poisons or the most violent alteratives. It is a common experience, that, if the horse finally lives through the treatment he is worthless from the effects of the medicines. Thousands of good horses are every year killed by drugs. In HUMPHREYS' SPECIFIC system you are absolutely free *from all such danger.*

IV.—They are simple. Being Specifics for particular diseases you know at once what to give. You can scarcely make a mistake. Even if you do, you have only lost your time, and have not killed the horse. When using the common veterinary drugs, a mistake is often fatal. With *simple* Homeopathic Medicines you are never sure of giving the right medicine.

V.—They are readily and easily given. You need not lose a moment. The SPECIFICS is ready just as you want it. The Medicator takes the dose from the bottle and places upon the tongue of the horse or cow, without loss of time or danger. No bottling, balling, choking, or strangling—irritating the animal and endangering the owner or his help.

VI.—They cure more quickly than any other Medicine. HUMPHREYS' SPECIFICS act through the medium of the nerves and the blood, rather than through the digestive organs. They begin to act before other medicines even reach the stomach.

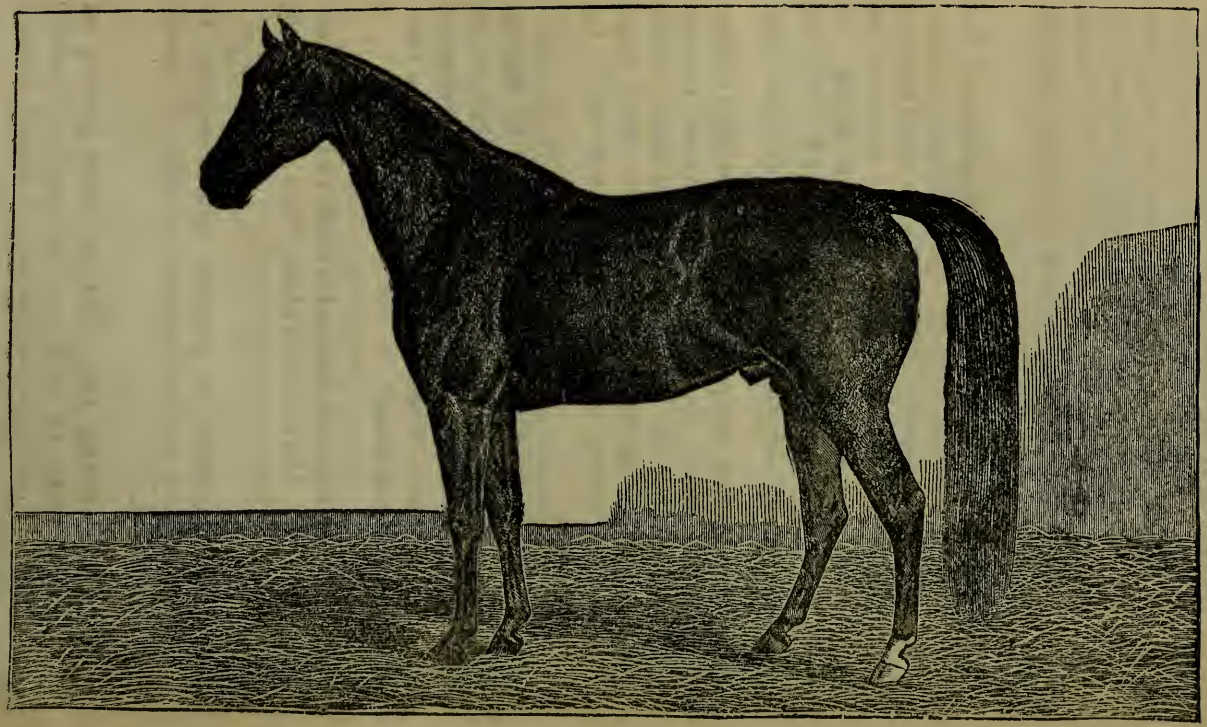
VII.—Every Ten Dollars invested in Humphreys' Veterinary Specifics will save you $100.00, and every HUNDRED will save A THOUSAND IN PROPERTY, besides an equal amount in time trouble and care.

VIII.—The saving in loss of stock is from one-half to three-fourths. This is the testimony of hnndreds of horsemen.

IX.—THE TREATMENT is humane, and if we may be humane as well as skillful, surely we should prefer it.

X.—Diagnosing the disease and giving of medicine is such, as any sensible, faithful man of ordinary intelligence can master without difficulty.

We could annex Ten Thousand Testimonials of their efficacy.

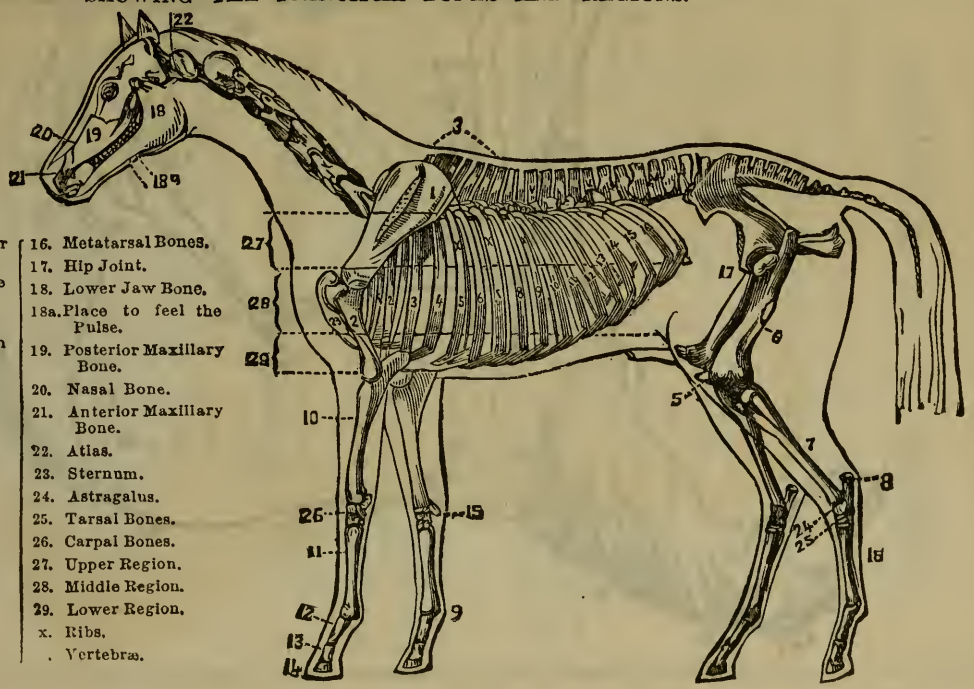


SKELETON

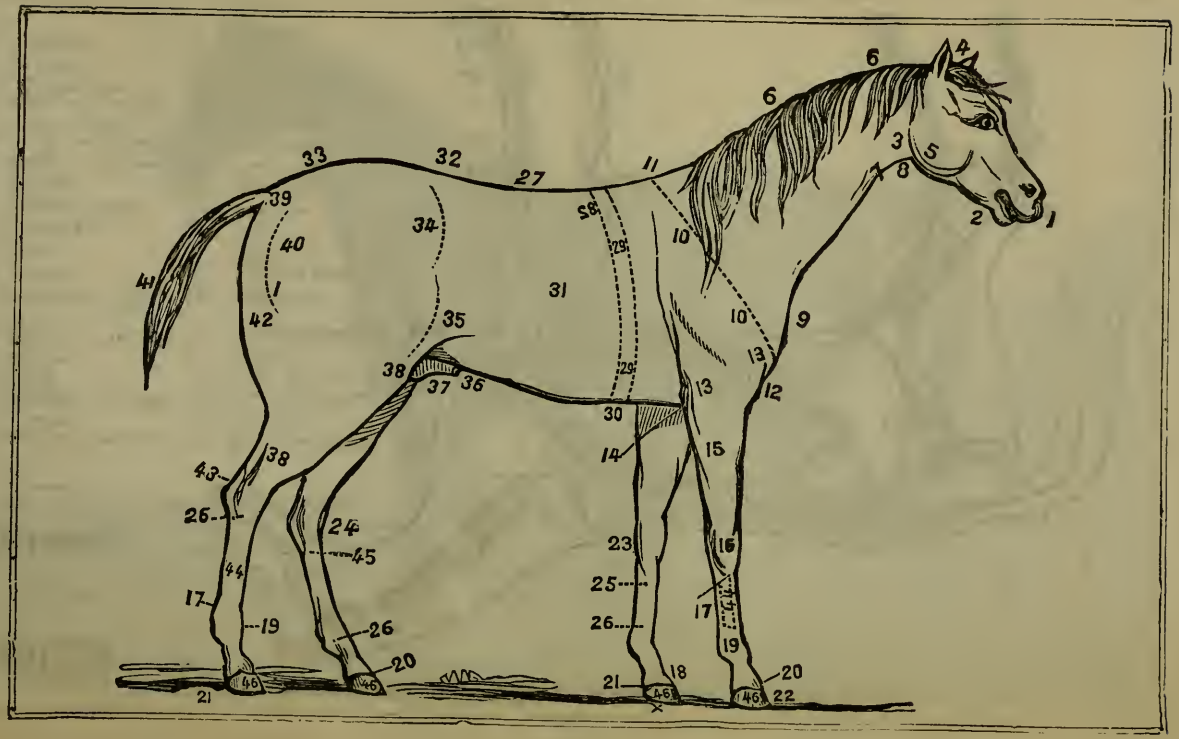
OF THE

HORSE.

SHOWING THE PRINCIPAL BONES AND REGIONS.



1. Scapula, or Shoulder Blade.
2. Humerus, or True Arm.
3. Withers.
4. Pelvis, or Haunch Bone.
5. Patella, or Stiffie.
6. Femur.
7. Tibia.
8. Os Calcis.
9. Sesamoid Bones.
10. Radius.
11. Metacarpal Bones.
12. Great, or Upper, Pastern bone.
13. Small, or Lower, Pastern Bone.
14. Os Pedis.
15. Trapezium.
16. Metatarsal Bones.
17. Hip Joint.
18. Lower Jaw Bone.
18a. Place to feel the Pulse.
19. Posterior Maxillary Bone.
20. Nasal Bone.
21. Anterior Maxillary Bone.
22. Atlas.
23. Sternum.
24. Astragalus.
25. Tarsal Bones.
26. Carpal Bones.
27. Upper Region.
28. Middle Region.
29. Lower Region.
x. Ribs.
. Vertebræ.



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SKETCH OF A HORSE,

Showing the principal points and the external parts to be examined for injuries, defects and diseases.

1. Muzzle.
2. Place of Fistula from Teeth.
3. Place of Mumps.
4. Place of Poll-evil.
5. Angle of Jaw.
6, 6. Crest.
7. Place of Fistula from Vein.
8. Throttle, Thropple or Wind-pipe.
9. Shoulder-point: place of Sores from Harness.
10, 10. Shoulder-blade.
11. Withers; sometimes the seat of Fistula: height of horses reckoned from the Ground to the Withers.
12. Front of Chest, Bosom, or Breast.
13, 13. The True Arm. (See Skeleton.)
14. Elbow; often the seat of Tumours.
15. Arm, or Fore-arm.
16. Knee, or Wrist; may be swelled, having a fungous growth; or the skin may have been broken—evidence of a fall.
17, 17. Back Sinew: place of Curb.
18. Place of Disease of Skin above the Coronet—Crown scab.
19, 19. Fetlock, or Pastern Joint
20. Coronet.
21, 21. Heel.
22. Contracted Hoof.
23. Mallenders.
24. Sallenders.
25. Seat of Splint, or Exostosis, on Side of Cannon-bone.
26, 26, 26. Seat of Bursal Enlargements.
27. Back, or spine.
28. Place of Saddle-galls.
29, 29. Girth, or Circumference in Measurement.
30. Place of Injury from Pressure of Girth.
31. Barrel, or Middle-piece,
32. Loins.
33. Croup.
34. Haunch.
35. Flank.
36. Seat of Warts.
37. Sheath, or Prepuce.
38, 38. Gas-skin, or Lower Thigh
39. Root of the Dock, or Tail.
40. Hip-joint—Round or Whirl-bone.
41. Rat-tail.
42. The Quarters.
43. Point of the Hock; seat of Capped-hock.
44. 44. Cannon-bone.
45. Place of Spavin.
46, 46. Hoof.

LIST OF HUMPHREYS' VETERINARY SPECIFICS,

AND PRICES OF SINGLE BOTTLES.

A.A.—**Cures Fevers, Congestions, and Inflammations,** as of the Lungs or Pleura (Pleuropneumonia), Inflammation of the Head, Brain, Eyes, Liver or Belly; Sore Throat or Quinzy; Blind or Belly Staggers; Hot Skin, Quick Pulse; Spinal Meningitis; Milk Fever in Cows..... .60

B.B.—**Cures Diseases of the Tendons, Ligaments** or Joints; Founder, Curb, Spavin, Strains, Injuries, Over-work, Rheumatism, Splint, Stifle.... .60

C.C.—**Cures Diseases of the Glands,** Distemper in Horses or Sheep; Nasal Gleet; Farcy and Glanders Discharges from the Nose; Farcy Buds; Swelled Glands; Scab in Sheep; Distemper in Dogs.... .60

D.D.—**Cures Worm Diseases,** and eradicates them from the System, either Bots or Grubs; Long, Round, Pin, or Tape-worm; Colic, or Emaciation from Worms..... .60

E.E.—**Cures all Diseases of the Air Passages,** as Coughs, Influenza, Heaves, Broken Wind or Whistles; Thick Wind; Inflamed Lungs, or Pleura (Pneumonia), with quick panting, hard or difficult breathing..... .60

F.F.—**Cures Colic,** Spasmodic, Wind or Inflammatory Colic; Belly-ache, Gripes; Hoven or Wind Blown; Diarrhea or Dysentery; Liquid or Bloody Discharges..... .60

G.G.—**Prevents Miscarriage,** Abortion, or Casting of Foal in Mares, Cows or Sheep; arrests Hemorrhages or Flooding, Throws off the After-Birth or Placenta, if retained..... .60

H.H.—**Cures all Diseases of the Kidneys,** Bladder or Urinary passages, as Inflammation, or Scanty, Difficult, Painful, Suppressed, or Bloody Urination; Kidney Colic..... .60

I.I.—**Cures all Cutaneous Diseases or Eruptions,** Mange, Farcy, Grease, Thrush, Erysipelas, Swellings, Abscesses, Fistulas, Ulcers, Unhealthy Skin, Rough Coat..... .60

J.K.—**Cures Diseases of Digestion,** Loss of Appetite, and "Off his Feed"; Results of Over-feed; Jaundice or Yellows; Ill-condition, Staring Coat, also Paralysis, Stomach Staggers..... .60

Stable Chart, Mounted on Rollers, and Pamphlet, Mailed Free.

FIFTH REVISED AND ENLARGED EDITION.

MANUAL

—OF—

VETERINARY SPECIFIC

HOMEOPATHY.

COMPRISING DISEASES OF

Horses, Cattle, Sheep, Hogs, Dogs and Poultry,

AND THEIR

SPECIFIC HOMEOPATHIC TREATMENT.

—BY—

F. HUMPHREYS, M.D., V.S.,

LATE PROFESSOR, AUTHOR, ETC., ETC.

HUMPHREYS' HOMEOPATHIC MEDICINE COMPANY,

COR. WILLIAM AND JOHN STREETS,

NEW YORK.

1891.

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PREFACE.

THE world owes much to Homeopathy—more, probably, than has ever been told, or will ever be known. It is something to be emancipated from drugs, from lancets, leeches, blisters and poisons; but it is more, to be relieved from the fear of them, and to be restored and preserved by forces mild as love, and gentle as the dews of heaven—forces unknown and unrevealed, until elicited by the genius of this system.

But these benefits are not confined to the human species. Animals may enjoy them as well; and heaven knows how much they need them. For to them the day of sickness is not merely the day of doom, but of suffering and of torture as well. Ignorance and cruelty seem to have controlled this branch of medicine—not that men are of necessity careless in regard to the lives of their animals, or designedly cruel as to the measures used to restore them when sick; but so little real knowledge prevails concerning their diseases, and so much error as to the proper methods of cure, that the most absurd and cruel measures almost of necessity prevail, with corresponding results. Some judicious stock-owners, taught by experience the fatality of the common methods of treatment, notwithstanding the torture and expense, have more humanely, if not more wisely, abandoned all treatment, preferring to let nature contend with disease alone, rather

than with disease and drugs united. But, thanks to Homeopathy, there is a better way.

For many years past, Homeopathy has been applied to the diseases of all domestic animals in Europe, with the most brilliant success. In this country, and the British Isles, within the last few years, not only have individual practitioners applied its remedies with equal success, but some large veterinary institutions, and most of our principal traveling equestrian troops and menageries, employ it exclusively in all diseases of their horses, experience having shown them its great value and curative power, and its immense superiority over every other method. But the inherent intricacies of the system rendered its general introduction for the cure of animals impracticable; and though, in the hands of some practitioners and some veterinary surgeons, it worked wonders enough to show its astonishing capacities, yet to the masses it has remained a sealed book.

The principle of Specific Homeopathy, which has proved so efficient in popular use, we have now applied to the diseases of domestic animals, and, from numerous trials, have proved it an entire success. With this Case and Manual every owner of stock may know every ailment among them, and can treat it successfully.

Not among the least benefits conferred by this new method is the ease and simplicity with which the proper medicine is administered. No tying, bottling, struggling, or choking are necessary. A neat little glass instrument (the Medicator) is put into the medicine, and takes up the requisite dose—a few drops—and at the proper moment, is placed in the mouth of the animal and discharged; in an instant the dose is given and an amount of labor is

thus saved to the owner, and of suffering to the animal, which is by no means trivial. Hundreds of animals annually die, or are rendered valueless from disease and drugging, that may be saved and promptly restored by the use of the Case of Veterinary Specifics. Several of our most experienced horsemen have given it their unqualified commendation, and use it daily in their establishments.

In the execution of this design I have consulted every authority and drawn upon every resource within my reach, and the experience of each has been made to contribute to the perfection of the whole, and all has been combined and compared with my now nearly twenty years of observation, study, and experience in the practice of Homeopathy. We flatter ourselves that for simplicity, completeness, and reliability it will commend itself to the judgment of a discerning public.

F. HUMPHREYS, M. D.

New York, May 18, 1860.

PREFACE.

SECOND REVISED AND ENLARGED EDITION.

It is now twelve years since the first edition of my Homeopathic Veterinary Manual was issued. At that time, the doctrine of Specific Homeopathy was less understood than now. Although the Veterinary Specifics had then been repeatedly tried in practice, yet there was a considerable degree of hesitation and embarrassment in their use, from the want of more ample experience and intimate knowledge of their curative virtues. The embarrassment and hesitancy has happily passed away. Though no special effort has been made to push them by extended advertisements, yet the Veterinary Homeopathic Specifics prepared by me have been constantly extending in use and gaining in confidence, until they are now recognized as the most simple, efficient and reliable medicines in use for the cure of the Diseases of Domestic Animals. Experience has amply demonstrated their value, and the long list of commendations appended to this volume sufficiently attest the value in which they are held by those who have long used them. These commendations come from every class of community. From professional horse-men and breeders, from Livery Stables and Horse-Railroad men, from Owners and Managers of Menageries and Equestrian Troops, from gentlemen farmers, Sporting men, Horse-trainers, and Farmers, and Newspaper Agriculturalists, and all unite in commendation of their excellence and recommendation of their use.

But few alterations have been found necessary. The doses have been rendered more uniform, and

ten drops has been fixed as the standard for horses, experience having shown that while less might be sufficient, more would not be injurious, and that while the exact number cannot always be arrived at, this standard of Ten drops is the dose which should be approximated as nearly as the circumstances permit, will be found the most convenient and effective.

Several new articles have been added. Notably that upon the CANADIAN HORSE DISEASE or Epizootic of which quite full description and treatment is given. A very large experience has shown how amply those Specifics are adapted to the cure of this disease. Among the many thousands treated by them in this city and elsewhere, none so far as can be ascertained, has terminated unfavorably. And such has been the demand for them that our Books have run out and the entire energies of the establishment have been taxed to keep up with the demand.

With the additions and corrections now made, I cannot but think this Manual will more than ever commend itself to all who have the welfare of our Domestic Animals at heart, and who desire, when such have the misfortune to become sick or diseased, to have remedies on hand which are simple, convenient and efficient for their cure.

F. HUMPHREYS. M. D.

New York, Nov. 4, 1872.

PREFACE.

THIRD REVISED AND ENLARGED EDITION.

It is now nearly five years since the Second Revised Edition of this Manual of Veterinary Homeopathic Specifics was issued. Since that period, this system of Veterinary Homeopathic Specifics has come more and more into general use, and a demand for a yet more complete and comprehensive work has been created. The general treatment of the diseases noted in the previous editions has been preserved, only that the doses of medicine have been somewhat increased, to conform more to popular usage and the practice of many veterinary surgeons. Still, doses are yet an open question, and the quantity given at a time is far less important than the kind of medicine. Several new sections have been added, notably those upon Spinal Meningitis in horses, and on the so-called Hog Cholera, and a chapter on Diseases of Poultry.

With these additions and annotations, we commend this manual to the attention of all engaged in the Breeding or Handling of Domestic Animals, as embodying the most plain, concise, simple, and yet effective method of treatment ever offered to the public.

F. HUMPHREYS, M. D.

New York, Sept., 1877.

PREFACE.

FOURTH REVISED AND ENLARGED EDITION.

It is now twenty-five years since the first edition of this work was issued. The work and the accompanying Specific Veterinary Medicines were issued to meet a large and ever recurring want, experienced, if not realized, by every breeder and dealer in domestic animals. That such animals get sick, and are lost by the thousand in numbers, and by the million in value, every year in this country, is well known. That such suffering and loss could, in large part, be prevented by the timely use of Specific Medicines and proper instructions, adapted to this end, was the firm belief, upon well founded experience, of the author. Accustomed, from childhood, to the care of domestic animals, a physician then of twenty years' experience, acquainted with their diseases and treatment from daily habit and experience, he wrote the first edition of this work, and issued the accompanying series of Ten Veterinary Specifics.

The success from the first was satisfactory. True, they were an innovation. People had for ages treated the diseases of domestic animals with such large doses and poisonous drugs, that the belief was ingrained that only such destructive medicines and doses could be successfully used. Veterinary physicians in general were as crude as the people, giving the most abominable and deadly doses, resorting, on the slightest provocation, to the most brutal firing, burning, bleeding, rowelling and dosing—a legacy of the cast-off and obsolete measures once

resorted to in treating people by the physicians of a past age. All this has been overcome by the good sense of the people, and the success of HUMPHREYS' HOMEOPATHIC VETERINARY SPECIFICS. The doses were found to be *large enough to cure.* The directions were so simple that *any intelligent man could carry them out.* The success was such that from *one-half* to *nine-tenths* of all animals, otherwise lost or destroyed by disease, were saved. The *loss of time by sickness* under this treatment was less than one-half of that of any other, while the cost of the medicines bore no relation to the saving of time and stock, in comparison with any other method.

After twenty-five years of successful experience, the system stands before the public, not in the garb of a mendicant, to receive its contributions, but with the air of one who has deserved and achieved success. It is no longer on trial or an experiment. THOUSANDS of the most intelligent FARMERS and STOCK-BREEDERS, of LIVERY STABLE MEN and HORSE DEALERS, of HORSE-RAILROAD MEN, and MINING, BREWERY, MANUFACTURING and EXPRESS COMPANIES, who are large dealers, breeders and handlers of stock, concur in their use and recommendation, after the most thorough and extended experience. Add to this a board of United States army cavalry officers, after the most careful examination and inquiry, concur in recommending their use and adoption in the United States army.

It only remains to say that no time, labor or expense has been spared to render the work and its accompanying CASE of SPECIFICS and chart as nearly perfect as the present state of medical and veterinary knowledge will admit.

F. HUMPHREYS, M. D.

New York, November, 1886.

PREFACE.

FIFTH REVISED AND ENLARGED EDITION.

As the years roll on there seems to be always something that may be amended even in the best men's work. Extend and enlarge it as we may, there is the constantly enlarging plane of scientific knowledge, newer and better appliances, and wider and more intimate demands for better and more approved remedies, which render a revised and possible extension of work desirable, if not imperative. So this work first issued thirty odd years ago has been amended and enlarged again and again to meet the demands of the day as well as the wants of its many patrons and readers.

It is somewhat comforting to know that after even a generation, in these stirring times, when so much is being added to every department of knowledge, that so little has to be amended and so comparatively little to be added. The old work stands, the guide and the refuge of thousands, while the newer hints and methods and remedies simply enlarge the field of usefulness and render more positive the means of its attainment.

Some new articles upon special forms or phases of disease have been added, others have been rendered more concise and direct, while several NEW SPECIFICS have been added to the list to meet special conditions, more especially in the breeding and rearing of stock, and the whole is presented in confidence that now more than ever it will meet the demand of that large and ever increasing intelligent class who find a pleasure as well as a profit in the breeding, training and improving and using of horses, cattle, sheep, swine, dogs and poultry.

F. HUMPHREYS, *M. D.*, *V. S.*

New York, cor. William & John Sts.
JULY, 1891.

INTRODUCTION.

PROPER and enlightened attention to the wants of Domestic Animals, is not only a sentiment of humanity, but a dictate of economy. To know at least in good part what is the particular ailment of an animal, and to know also how to relieve it, would seem to be a necessary obligation of ownership. The least we can return to the many faithful animals given us, is to provide for their reasonable wants, not only in health, but also in sickness and disease. Not that every man who owns a horse, should be necessarily a veterinary surgeon; and yet the way is so simple that any intelligent person may readily cure a very large proportion, nay, almost every disease to which his animals are exposed, and yet bestow upon the subject only a moiety of attention.

Among the many blessings that Homeopathy has conferred upon the world, not among the least is the immense improvement which it has effected in the treatment of the diseases of Domestic Animals. With but little variation, to meet their peculiar habits and susceptibilities, the same remedies which have been so efficient in mitigating and curing the disease of men, women and children, have been found equally successful in arresting the diseases to which all classes of Domestic Animals are liable. The contrast is even greater. Probably from the fact that the treatment of sick animals has been but little understood, and intrusted to the hands

mainly of ignorant persons, who have pursued the most crude, cruel and destructive measures, often far more dangerous and life-destroying than the disease itself, a large proportion of the sick have died or been tortured to death. But when the same diseases are subjected to the mild and benign influence of intelligent Homeopathic treatment, it is found that almost every disease among them is within control, even the most fatal yielding to its magic influences.

Although at first sight it may seem strange, that animals should be successfully treated by the mild and apparently insignificant doses of Homeopathy, yet a moment's reflection will suffice to give many reasons why this should be so. Even were it not susceptible of explanation, experience has abundantly demonstrated the fact, that animals are, if possible, even more susceptible to Homeopathic treatment than men, and its success in their case is even more striking and brilliant.

This may be, perhaps, attributed to their more regular habits, confinement to the same food and drink, absence of excitement, and freedom from the many articles of food and drink in use among the human species, which are more or less medicinal.

Owing to these circumstances, animals are very impressible, and the doses for them need not be so much larger than for the human species. It seems to be a law of nature, that the more delicate the organism, the more subject to disease. Wild animals are almost entirely exempt, while the highly artificial lives of some Domestic Animals render them subject to numerous ailments and to some very formidable diseases. Yet, as a whole, animals are far less subject to disease than men, and far more amenable to cure.

The treatment of Domestic Animals with SPECIFIC HOMEOPATHIC REMEDIES, has numerous advantages. THE MEDICINES ARE GIVEN AT ONCE and without trouble or annoyance, even without taking a horse from his team, or a cow from her stall. THEY PRODUCE NO POISONOUS OR PROSTRATING EFFECT so that the animal rallies at once, and without loss or deterioration of value. ANIMALS RECOVER MUCH SOONER and hence are able to resume work much earlier after sickness, than under any other system. But more than all, it is far more successful. Slighter diseases yield at once, and often from a single dose, while the most formidable cases of Pleuro-Pneumonia, or Founder, in horses, and Lung Murrain and Milk Fever, in cows, cases that are almost absolutely incurable under old treatment, even when well conducted, promptly respond to the curative influence of Specific Homeopathic Remedies, while it is well known that even when animals recover under the old system of treatment, such have been the ravages of disease and medicine, that their value and usefulness are generally destroyed.

CAUTION.

☞Take care not to confound DR. F. HUMPHREYS' VETERINARY SPECIFICS with the *spawn of imitations* which the wonderful success of his SPECIFICS has warmed into existence. Imitators have taken *his labels*, *his doses* and *directions*, and even *his name*, under which to impose their IMITATIONS upon the public. Care should be exercised to avoid impositions. Several parties have reported the *loss of valuable stock* through the use of these imitations.

Founded Auburn, N. Y., 1854.

562 Broadway, New York City, 1857.

109 Fulton Street, New York City, 1877.

1890.

111 & 113 WILLIAM ST., and 61, 63 & 65 JOHN ST.,

NEW YORK CITY.

MEDICINES BY MAIL OR EXPRESS.

It has been a feature of **Doctor Humphreys' Family Specifics, Veterinary Specifics** and **Witch Hazel Oil** from the first, to send them in any quantity, *from a single vial to* A FULL CASE OR BOX, to any address, prepaid, on receipt of price. Thus any one may obtain them, if not at the dealers, then by post from the nearest office. Write the order plainly, and inclose Post Office Money Order, Express Money Order, or Register the Letter for safety.

LIST OF

VETERINARY HOMEOPATHIC SPECIFICS

AND

SYMPTOMATIC INDICATIONS FOR THEIR USE.

A.A. Cures — **Fevers, Congestions, Inflammations.**

THIS Specific is especially curative for all FEVERS, febrile conditions, and *Inflammations*, and for all conditions attended with QUICK, FULL, or STRONG PULSE, HEAT, *Great Excitement of the System;* or for the *Coldness, Shaking, or Panting*, which precedes fever.—

In particular for:—*Coldness, Prickly Coat, Shaking* or *Panting Chill.*—

Heat of the Head and red, injected eyes.—

INFLAMMATION of the EYES, from congestion, or from something having gotten into the eye, or an injury.—

INFLAMMATION of the THROAT—QUINSY—with dificult or painful deglutition, and general fever, in alternation with C.C.—

INFLAMMATION of the WINDPIPE (Larynx), with heat, loud, stridulous whistling breathing, even with danger of suffocation.—

INFLAMMATION of the LUNGS or PLEURA, PLEURO-PNEUMONIA, with first Chill, then fever with heat of the body, cold legs and ears, difficult, painful, oppressed, labored breathing, with grunting or groaning and cough, painful, shrinking of the sides when touched,—in alternation with E.E.—

Palpitation, or loud, hurried, or unequal beating of the heart.—

INFLAMMATORY COLIC, with extreme pain; or when F.F. fails to give relief, or when colic threatens to terminate in inflammation of the bowels.—

Inflammation of the *Liver* in Cattle.—

Inflammation of the *Kidney* or *Bladder*, in alternation with H.H.—

HOT or RHEUMATIC *Swelling* of the *Feet* and *Legs*.—in alternation with B.B.

INFLAMMATION of the FEET, with heat, extreme tenderness, difficult backing, moving, or even standing on them,—also B.B.

MILK FEVER in Cows after Calving.—

EVIL EFFECTS of a CHILL, or long exposure to a cold draft or current of air.

FITS, *Convulsions*, or *Staggers*—the animal suddenly stands, falls back, or to one side, or rushes off madly, or falls down.—

Congestion of the *Head*, with dull, stupid, sleepy hanging of the head, or its opposite stage of excitement.—"Blind Staggers."

Inflammation of the *Brain*, with heat, excitement, *frenzy*.—

The result of fear, fright, anger, or excitement,—as after running away.

EFFECTS of OVER-HEATING of horses, from being over-driven or over-excitement, as in running, trotting or racing.

Always between heats or after trotting or running, give A.A.

Invaluable for regaining wind after racing or trotting,

PROSTRATION or LOSS of STRENGTH, from a SUN-STROKE, or being over-heated.

PINK EYE, with fever, heat of the head, red, or watery, or injected eyes, swelled legs, swelling under the jaw, and dull, stupid appearance. See also C.C.

SPINAL MENINGITIS in horses, with dull, red or injected eyes, heavy hanging head, slow swaying or feeble gait, painful, stiff, awkward turning or backing; pain on pressure along the spine or back; difficult standing; tottering or swaying about; is easily pushed over while standing, or inability to rise when down; suppressed or very scanty staling or dung.

HOG CHOLERA, so called, with dullness, weakness, don't eat, unsteady gait, buries its head or body in the straw, shiverings and feverish heat, quick pulse or breathing; bowels bound, or dung hard and dark colored; efforts to vomit; red spots or patches on the inside of the legs, belly or breast, which swell, become blood red or crimson or purple; labored breathing, heaving of flanks and cough; inability to rise in the advanced stages. See also I.I.

B.B. Cures { Strains, Lameness, Rheumatism, Injuries from Over-Work;—Founder, Spavin, Splint.

This Specific is especially curative for all diseases, affections, or morbid conditions of the MUSCULAR SYSTEM, the SINEWS, TENDONS, and JOINTS.—

More especially for:—

RHEUMATIC STIFFNESS or Lameness of the Entire System, of the forelegs, shoulder, back, or loins, or a single leg, the result of a strain, over-work, or a chill.—

Affection of the *Hock*, Knee, or Pastern, with heat, stiffness, or Lameness, resulting in spavin, splint, ring-bone, or similar defect.—

INCIPIENT SPAVIN — bone-spavin, blood-spavin, so called, with heat and tenderness of the part, and slight or severe lameness.—

OLD SPAVIN in alternation with I.I.

RHEUMATIC LAMENESS of the Shoulder, hock, knee, or pastern.—

Tenderness or weakness of the Tendons, resulting in stifle or dislocation of the patella.—

STIFLE or dislocation of the patella.

Want of Synovia or joint oil, and cracking on moving the joint.—

Results of fatigue, or of over-work.—

Lameness of any kind, or when the origin is uncertain.—

Old CHRONIC FOUNDER, or lameness and stiffness on first starting.

C.C. Cures } Distemper, Gleet or Strangles, Influenza, Epizootic, Nasal Discharges, Swelled Glands.

This Specific is especially curative for all diseases of the MUCOUS MEMBRANE and GLANDULAR SYSTEM. Hence is especially curative for:—

INFLUENZA, with rough coat, red or watery eyes, *Sore Throat*, *Profuse Discharge* from the *Head*, first of thin, acrid, then of copious, thick, yellow, or greenish mucus, attended with fever, great weakness or debility, swelling of the glands of the neck, or even of the head, face, throat, sheath, and limbs, or even general dropsy.—

QUINZY, or Sore Throat, with fever, heat, *Soreness* and *Swelling* of the *Throat*, difficult, painful, or even impossible swallowing, so that the fluid returns through the nostrils.—

Soreness of the Throat, so that the animal will not swallow, but quids his food, and splashes the water about with his nose.—

NASAL GLEET, or Strangles, with swelling and even suppuration of the glands about the neck, discharge of thick, copious matter from the nose, and general emaciation.

DISTEMPER of young horses, with swelled glands, nasal discharge, sore throat, staring coat, and sometimes difficult breathing, swelled legs, in alternation with A.A., or with H.H., if the urinary organs are affected.

D.D. Cures

Worms, Bots or Grubs.

This Specific is especially curative for all conditions or diseases arising from the various kinds of *Worms*, *Bots* or *Grubs*, or other species of ENTOSIA in the animal system, as well as for the *morbid cause* which fosters them.—

In particular for:—

Bots or *Grubs*, indicated by *Emaciation*, the horse losing flesh, or keeping very poor without apparent cause, enlarged or pendulent abdomen; turns of griping or colic; eating or drinking greedily.—

Appearance of Bots or Grubs hanging about the fundament, or discovered in the manure.—

Morbid Appetite; eating lime, chalk, or gnawing the wall.—

Frequent returns of Colic without apparent cause.—

General Unthriftiness, staring coat, want of spirit, and ill condition.—Easily fatigued

E.E. Cures } Coughs, Heaves, Influenza, Broken Wind.

This specific is especially curative for all morbid conditions of the air-passages and Lungs, especially for:

Bronchitis or common cough, coming on after exposure, attended or not with severe pain, or even with some heat or fever.—

Cough, without any other apparent symptom. (See also A.A.)

Cough, attended with whistling, roaring, or other difficulty of breathing.—

Inflammation of the Larynx, with loud, difficult, stirdulous breathing, (after the more violent symptoms have been removed by A.A.).

Inflammation of the Lungs or Pleura (Pleuro-Pneumonia), with painful, labored, difficult breathing, occasional grunting or groaning cough, heat of the body, cold ears and legs, (after or in alternation with A.A.).

Difficult, painful breathing.—

Breathing intercepted or accompanied by a grunt.—

Loud whistling when hurried or driven fast.—

Results of Bronchitis, Pneumonia, or other badly cured affection of the lungs, or air-passages.—

Advanced Stage of Pleuro-Pneumonia in Cattle, after the use of A.A., or in alternation with that remedy.

F.F. Cures

Colic, Belly-ache, and Wind Blown; Diarrhea, and Dysentery.

This Specific is more especially adapted to the cures of the various forms of COLIC or ENTERALGIA and the derangements arising from *over-feeding, improper food*, or *deranged digestion*. Hence it is always curative for:—

COLIC, SPASMODIC, or FLATULENT COLIC, with turns of terrible griping and distress, the animal pawing, rolling, lying down and getting up, straining to pass wind—and especially when occasioned by flatulent or improper food, deranged digestion, or a chill: (compare also A.A. for inflammatory colic).—

Hoven or *Wind-Blown*, in consequence of being gorged with clover or too succulent food in early summer. The ANIMAL IS PUFFED up like a DRUM, is terrible uneasy, or stands stupidly, passes nothing, and in cattle rumination has ceased.—

Hoven or over-distention, in consequence of being gorged with grain or other improper food. (See also J.K.).—

DIARRHEA, or too loose passages in calves, sheep, cattle, or even horses, frequent passages of loose, bad-colored, unnatural dung —often attended with weakness and emaciation.—See also SPECIAL F.F.x, page 28*a*.

DYSENTERY, with frequent slimy, bloody, or discolored discharges of dung, attended with constantly increasing weakness and loss of flesh.

G.G. Cures } Miscarriage, Retained After-birth, Uterine Hemorrhage; Unnatural Heat or Masturbation.

This Specific is especially appropriate to the diseases or morbid conditions of the reproductive system. It is a *preventive* of MISCARRIAGE or the CASTING of CALF, when it has occurred in a herd of cattle, and to prevent the infection from spreading; or when *premonitory symptoms* have been observed in cows or mares; also for—

RETAINED AFTER-BIRTH, or *imperfect cleansing* in cows, mares, or other animals,—It acts promptly and perfectly.

Stimulates the contraction of the Womb after delivery, and even during labor, in delaying or tedious delivery.

HEMORRHAGE or FLOODING, occurring before, during or after the delivery of the foal or calf.

HYSTERIA or "FOOLISHNESS" of mares, with *too frequent* and *too excessive* and *too long continued heat.*

TOO ARDENT HEAT, rendering her fractious, unmanageable and untrustworthy.

STERILITY IN COWS OR MARES from excessive and too frequent heat.

OVER-EXCITEMENT, with even premature losses in Stallions.

MASTURBATION OR SELF ABUSE in Stallions, or in young horses.

H.H. Cures } Kidney, Urinary Diseases and Dropsy.

Especially curative for all affections of the urinary apparatus, the kidneys, bladder, and appendages.—

Particularly for:—

INFLAMMATION of the KIDNEYS, with *frequent, scanty, high-colored, or even bloody urination*, or straining with passage of a few drops, or ineffectual attempts at staling, heat of the loins and shrinking when pressed upon, pain in turning, back is arched and legs wide apart, or he straddles in walking, with heat and quick pulse, and anxious appearance.—

INFLAMMATION of the BLADDER, with frequent painful attempts at staling, and discharge of but a few drops of hot saturated urine, which may be clear, or mixed with *mucus*, or more commonly *bloody*.—

Constant attempts to void or pass the urine.—

Too constant urination.—

Dropsy of the Belly.—

General Dropsy, Anasarca, the entire body, sheath, and limbs are swelled.—

Frequent attempts at staling, with effort or straining, and passage of but very little water.—

RENAL COLIC, or colic from irritation of the kidneys, the horse throws himself down, rises, and threshes himself about in terrible distress, making frequent or almost constant attempts at staling, with passage of very little or trifling discharge of water.—

RETENTION of URINE, the animal can pass but little, or the urine may be almost or quite suppressed.—

BLOODY or *blood stained* urine, accompanied or not with tenderness of the loins, or lameness, as if from an injury.—

Over Excitement, (sexual) with even premature losses in stallions.

DROPSY of the LEGS, SHEATH, or *along under the belly*, with scanty secretion of urine.—

GENERAL DROPSY or *swellings of the face, lips, belly, sheath, legs*, and all depending portions of the body, with stiff, clumsy movements and scanty secretion of urine.

I. I. Cures } Eruptions, Mange, Farcy, Grease, Thrush, Abscess, Ulcers, Fistulas, Swellings, Erysipelas.

THIS Specific is especially applicable to all diseases of the SKIN or UNDERLYING TISSUES, to all ABSCESSES and ULCERATIONS, and the *morbid condition precedent* to their appearance. Hence for:—

MANGE in horses, or dogs, with violent itching, and eruptions of small, bran-like scales, or of reddish pimples.

ERYSIPELAS, with red, hot, inflamed skin, heat, swelling, and tenderness of the part.—

FARCY, with buds appearing along the course of the inflamed lymphatics, with or without discharge, or ulceration, hardened lymphatics or cords, and swelling or tumefaction, pain and tenderness along the inside

of the thighs, swelled legs, ulcerations, cough, great debility and emaciation. (Compare also C.C.)—

GREASE or SCRATCHES, with swelling and heat, cracks, or deep clefts, discharge of thick, gummy matter, or even formation of unhealthy vegetations or grapes. Also A.A.

ABSCESS or hot swellings, with a collection of matter, wherever situated.—

ULCERATIONS, either flat, superficial, or deep-seated with sinuses, pipes, or FISTULAS, burrowing deep, with narrow openings.—

FISTULAS or ULCERS, with narrow openings, and deep-seated or torturous ulcerations.—

WARTS, or horny appendages, or unhealthy-thickening of the skin.—

UNHEALTHY SKIN, every injury tends to suppuration.—

FALLING OFF of the *hair*. –

ROUGH STARING or *unhealthy coat*.—

PLEURO-PNEUMONIA in horses or cattle, in the more advanced stages, with great prostration or sinking of strength, or in alternation with E.E.—

HOG CHOLERA in the more advanced stages or malignant form, with red pimples or dark patches of the skin, ulcers or blisters, bloody discharges, great weakness and rapid falling of strength, after or in alternation with A.A.

DIARRHEA or SKITT in calves, with coldness, panting and rapid loss of strength. See also F.F.

J.K. Cures } Indigestion, Constipation, Paralysis.

This medicine is especially applicable to all conditions arising from, or in connection with DERANGEMENTS of the DIGESTIVE SYSTEM, and morbid conditions of the cerebro-spinal system connected therewith. Hence it is especially curative for:—

INDIGESTION, the mouth is slimy, the tongue foul, dung dry, or mixed with undigested oats, the horse is weak, thin, sweats easily, and does not fatten, with bad coat and hide bound skin.

LOSS of APPETITE, deficient appetite, "off his feed."—

IRREGULAR APPETITE.—

CRIB BITING.—

RESULTS of OVER-FEED, the horse is dull, stupid, moves clumsily, has slimy mouth, foul tongue, scanty staling, and dry, scanty dung.—

STOMACH STAGGERS, with dull, stupid, sleepy condition, scarcely moves or eats, hanging head, slow, labored breathing, half closed, yellowish eyes, slight convulsions, or sometimes uneasy turns as if distressed.—

BAD CONDITION, staring coat, irregular appetite, bound bowels, want of spirit, and constantly increasing emaciation.—

Staring Coat, in connection with indigestion.—

PARALYSIS of the hind legs, the animal is weak behind, sways about, totters or falls,

and cannot rise, or gets out his fore-feet, but cannot rise from paralysis.—

Spinal Meningitis after the more violent symptoms have yielded to A.A., or, when there remains *great debility* or *inability to rise*, or when the animal is slow in recovering the use of his limbs or his strength.—

Incipient paralysis, tottering movements, swaying about.

Ill Growing, *brittle*, *weak*, or defective hoofs, tendency to quarter cracks.—

Seedy Toe and Shaley Hoof.

Defective horny deposit, liability to sand or quarter crack.

Deficient or Uncertain Sexual Power in Stallions, from too early or excessive use.

TETANINE.

T.T. Cures Lock-Jaw, Tetanus, Trismus, Vertigo Spasms, Convulsions.

This new Specific has been used very successfully in this usually fatal malady, having saved many valuable animals.

Directions with each bottle. Price the same as other Veterinary Specifics. Sent by mail or express, on receipt of price.

The following remedies are also employed externally as applications, at the same time that the Specific remedy is also internally employed.

SPECIAL VETERINARY SPECIFICS.

NOT IN THE USUAL CASE.

Put up only in 4 oz. and 8 oz. Bottles

L.L. Cures } Masturbation or Self-Abuse in Colts or Stallions.

M.M. Cures } Sterility or Failure to Breed in Cows, Mares or other Animals.

N.N. Cures } Sexual Weakness, Loss of Vigor, or Impotence in Stallions.

A.A. × Cures } La Grippe; Influenza; Distemper; Lung Fever after La Grippe, or Distemper.

B.B. × Cures } Pneumonia or Lung Fever after La Grippe; Heaves or Broken Wind.

F.F. × Cures } Diarrhea or Scouring in Colts or Calves.

T.T. Cures } Lock-Jaw, Tetanus, Trismus, Vertigo, Spasms, Convulsions, Staggers.

HUMPHREYS'

VETERINARY

CURE OIL.

☞ **Surpasses every other application for ALLAYING PAIN, ARRESTING INFLAMMATION and PROMOTING HEALING. Nothing has ever been invented or known which so promptly heals a Wound or Sore, or so quickly arrests Inflammation and hastens Healing.**

LARGE JAR, PRICE $1.00

It is the Best Possible Application and Cure for:

Injuries from Kicks, Nails, Thorns, Spikes, Barbed Wire, Stakes, or any **Lacerated, Torn or Cut Wounds.**—Apply the Oil with the finger after clearing the injury from splinters, gravel or dirt, if any be there. If the injury is extensive and it can be done, bind up the wound, or take some stitches in it, and apply the CURE OIL morning and night.

Burns or Scalds from Sun, Steam or Water.—Simply apply the CURE OIL two or three times per day.

Sores or Indolent Ulcers, on whatever part of the body or legs, simply require anointing with the CURE OIL on the end of the finger morning and night.

Sore, Scabby, Itching Patches or Bare Places on the Skin require the same treatment.

Harness, Collar or Saddle Galls or Chafings require the same application.

Sore Teats in Milch Cows or other Animals are cured like magic by gently washing the bag and applying the OIL to the sore place every day.

Fistulas or Deep-seated Ulcers, wherever situated, are healed by the CURE OIL whenever you can get the OIL down to the bottom of the Fistula. Sometimes a syringe may have to be used, or better, a capsule filled with the OIL inserted daily.

Broken Knees or Open Joints require binding up and the daily application of the CURE OIL.

Old Scars, Horny Places, or Warts.—Apply the CURE OIL often. It helps wonderfully.

Hot Swellings, Boils or Tumors.—Apply the CURE OIL morning and night.

Scratches, Greased or Cracked Heels.—Cleanse the part with warm water, or in very bad cases, with a bran poultice, and apply the CURE OIL every night. Give also SPECIFIC A.A. if there is fever, or SPECIFIC I.I. if the disease is of long standing.

Broken Hoof, Sand or Quarter-Crack.—Clean the opening; apply the CURE OIL and secure the cleft with a barbed nail or wire suture, and then apply the CURE OIL daily, giving SPECIFIC J.K. to toughen and promote healthy growth of hoof.

Corns, Tender or Bruised Soles.—Cleanse and cool the foot and apply the CURE OIL to the sole and frog at night.

For Dry, Shaly or Ill-Growing Hoofs, apply the CURE OIL to the sole and outer hoof at night.

☞ The great advantage of HUMPHREYS' VETERINARY CURE OIL above every other application is :—That it can be applied at once to a sore, a ragged, torn or ulcerated surface or wound however extensive or severe.

It is applied gently with the end of the finger. It often cures without bandaging, strapping, or even covering, and hence may be used where bandages or coverings cannot be applied or kept in place.

Humphreys' Mange Lotion, an application for the cure of Mange or Itch upon Horses, Cows, Calves, Sheep, Dogs, or other stock and animals.

Humphreys' Insecticid Oil, an application for the destruction of Lice, Ticks or other Vermin on Calves, Dogs, Birds, Chickens, etc.

Doses. How Much?

It is an error to suppose that animals require very large doses of SPECIFIC HOMEOPATHIC MEDICINES, for experience has shown sick animals to be very impressible, and easily influenced by appropriate medicine, and in general, not to require as frequent repetitions as the human subject. Those who are accustomed to give large and powerful doses of poisonous medicines in order to produce some revulsive action, such as a cathartic or sudorific, or even as an alterative, can not from hence infer the proper quantity required when only a curative result is desired.

Only experience, hence, can answer the question, How much? And experience has amply shown that for horses ten to fifteen drops is the range of doses best adapted in ordinary cases, and that while cattle and hogs require rather more, sheep and dogs require less than the doses mentioned. We have indicated in each disease the dose supposed to be best for that particular case, yet to give two or five drops more in any given case would probably not be hurtful, while to give a few drops less would not endanger the curative action for want of the requisite quantity. The truth is that precision in quantity is not indispensable to a cure. The doses indicated we think are best, but a deviation from them is by no means fatal. One physician gives much more and another many times less, and both are successful. Medicine gives a curative impulse often as well or better with five or ten drops as with more. Besides, in giving medicines to animals, from their restlessness, dodging the head, and other similar disturbing circumstances we can not, and happily need not, be very positive. Give the doses as near the directions,

as you may be able, and the result will be satisfactory. The best and safest rule is always to follow the directions given in the book, chart, and on the bottles. It is unsafe for you to assume that you know more than the man who made the medicine and has had eight and twenty years experience and observation in using them. Young animals require but half as much as grown ones.

Repetitions.—How Often?

The effects of Specific Homeopathic Remedies are very prompt and positive. Often immediate, in cases of colic or other forms of neuralgia, as the medicine acts at once through the medium of the nervous system. In other acute cases, such as inflammations, the effect is equally as prompt but not so openly manifest. The medicine placed in contact with the nervous papilla of the tongue is at once by means of this connection conveyed over the entire system, while the stomach being a secreting rather than an absorbing surface, repels rather than absorbs a medicinal influence, so that medicines act better for being placed on the tongue than when they are introduced into the stomach.

The time to repeat is when the good effect has terminated. All rules of repetition are based upon this axiom. Thus, in colic and inflammation of the bowels, we repeat every fifteen, thirty, or sixty minutes. In inflammation of the lungs, or chest, head, or other noble organ, or in pneumonia or similar acute diseases, we repeat once in two, three, or four hours. In the yet less severe forms of disease, such as Fevers, Founder, Strangles, Distemper, Lameness, or similar diseases, a dose once in four hours, or four times per day, is quite sufficient.

While in Coughs, Heaves, Ulcers, Eruptions, and similar affections, if recent, a dose morning and night is ample. In old chronic affections, a dose every day, is better than more frequent repetitions. In most cases these Specifics continue to act for weeks after having been given if undisturbed by the use of other medicines.

Alternation of Remedies.

In general but one medicine is required for a disease, and it may be repeated from time to time until the case is cured. But cases are often met with where two Specifics are indicated at the same time, one to meet one phase of the disease, and a different specific to meet another. In all such cases the two medicines are given *alternately.* Thus give a dose of one Specific and then, after the proper interval give the other Specific, and thus continue the two *alternately*, at such intervals as the directions demand. Nor should we be deterred from the use of a specific in a particular case, because the name given it indicates a different use, for a medicine may be curative or specific for a particular disease, and equally so for a different or even seemingly opposite one.

How to Choose the Remedy.

In the use of my Homeopathic Specifics nothing can be more simple than the choice of the Remedy, while in attempting to use the ordinary Homeopathic preparations, the choice of the remedy is very dificult and intricate. From an examination of the animal you will have some idea of the nature of its disease, and will at once turn to the Index and page in the Manual describing that and similar diseases,

Continue the search until the true description is found, and the proper treatment pointed out. *If in doubt* as to the particular remedy always give specific A.A. It rarely fails to help, and prepares the way for other specifics when they are required and often cures while it always gives you time to think and observe. Many good practitioners always give specific A.A. first. It is not necessary that all the symptoms given should be present, as the Specific in all cases has a wider range of action than the disease.

If a sufficient length of time has passed to clearly show that no good has resulted, the case should be looked over again, and a more appropriate Specific selected.

How to Give the Remedy.

Not among the least recommendations for the use of my Homeopathic Specific, is the ease and facility with which they may be administered. No tying, struggling, or choking are necessary. The animal should be approached quietly, usually on the OFF SIDE if the Medicator is to be used, and medicine placed, if possible, upon the tongue, well back—thence it is absorbed, and acts at once through the medium of the nervous system. The simplest medium of doing this is best. For this purpose the use of the Medicator is best—a small glass instrument invented by me. It is about five inches in length, made of firm, heavy glass tubing (see plate page), the lower third bent so as to readily enter the lips. The upper end is funnel-shaped the size of the end of the finger, and covered with an air-tight rubber cap, so as to form an air receiver. The Medicator, taken in the right hand, with the fore-

finger upon the top or rubber valve, is introduced into the proper vial, and pressing slightly upon the valve the air is exhausted, and on removing the finger the fluid is forced up into the tube sufficient for a dose. A little experience will enable one to take up five, ten or more drops as may be required. The Medicator thus charged with the dose, can, at the convenient moment, be inserted just within the lips of the animal's mouth, the farther back upon the tongue the better, when a slight pressure upon the top of the tube injects the contents, and the medicine is given.

The Medicator should be held upright; never turned down or held horizontally, as the air is thus introduced and the medicine may drop out. Held upright until it is quietly inserted between the lips of the animal, no such difficulty occurs. Nor is it necessary to push the tube far enough into the mouth to expose it to the danger of being broken or crushed between the teeth. The moment the fluid from the tube comes upon the tongue the animal will open the mouth, and in an instant the medicine is injected upon the tongue or in the mouth, and the operation is finished.

In other cases the tongue may be gently hooked out of the mouth with the finger, and the medicine may be dropped or turned upon it. Horses are fond of sugar, and the medicine may be dropped upon a small lump, and fed from hand. After a few times they will call for their sugar, when the owner comes into the stable, at the proper time. With cattle or sheep, raise the head a little, and inject the medicine with the Medicator, or pull the tongue out on one side, and drop or eject the medicine upon it.

When quite a number of animals are to receive the same medicine, it is better to drop out the

quantity for all in a proper bowl or other vessel, and add a spoonful of water for each dose to the medicine. Then stir well the entire mass, and give a spoonful, or other proportionate quantity, to each. Hogs usually, when sick, lie quietly upon the side, and the medicine may hence be injected into the mouth with the Medicator, or it may be given in a spoonful of sweet milk, poured in between the jaws, or it may be given them to drink. Care must be taken in giving fluid to hogs, not to forcibly raise the head, as they are thus easily strangled—even to death. Dogs may have the medicine in a little sweet milk, or it may be even turned in through the nose. Yet the Medicator is an improvement upon all these plans, as it takes up and discharges the proper dose at once.

N. B.—Take off the rubber cap, and cleanse the Medicator when using it for different medicines or specifics.

Housing and Care of Sick Animals.

When an animal shows signs of illness, it should be immediately cared for. The horse, unless in cases of very slight Colic, or other ailment, when the medicine may be given at once, and his work continued, should be placed in a roomy, convenient and warm stall, well littered, with plenty of dry bedding, and well blanketed, unless in very warm weather. Cattle, sheep, and hogs, as soon as it is noticed that they are sick, should be separated from the herd or flock, and placed in comfortable and well littered and especially dry apartments. This is necessary not only to prevent disease spreading to other stock on the farm, but for the convenience of nursing them, giving them medicines, but also to place them in the very best position for a cure.

Often a little timely care and nursing will save and restore an animal, which, if permitted to run with the stock, and take its chance, would unquestionably be lost. A sick animal as truly needs attention as a sick child. Not always will mere nursing restore a sick animal, but it always places it in the best possible condition to effect a cure, and without it the best medical treatment will often be fruitless.

Diet of Sick Animals.

In general, when animals are seriously ill, they are without appetite, and will take little or no food —nature thus indicating the propriety of abstinence. But in all cases the food given or allowed should be quite limited in quantity—one-half, one-third or fourth of the usual quantity, and only that which is nourishing, easily digested, and generally relaxing. With these general restrictions, the usual kinds of food may be permitted, except in the case of dogs, where *only stale bread and milk* should be allowed in urgent cases, and but little or no meat, and no salted or spiced food in any case. After the more urgent symptoms of disease have passed over, and the animal is recovering, we should be careful and not give full feed, as a relapse may thus easily be provoked, and prove very stubborn and dangerous.

At least half an hour or an hour should intervene after taking a dose of medicine, before the animal should be fed, as the system is more susceptible then than at any other time.

ALL NOSTRUMS, DOMESTIC MEDICINES, or herb-teas, however harmless or beneficial otherwise, are STRICTLY PROHIBITED, as the Specific Medicine must be permitted to act upon the system entirely undisturbed by any such prejudicial influences

Injections of water, soap and water, or salt and water are always allowable, and may often be used with great benefit. They are usually administered without difficulty, in no case injurious, and should one fail to produce an evacuation, another or more may be repeated, until the result is accomplished.

How to Feel the Pulse.

This is best done by placing the finger on the artery, where it passes over the lower jaw, about four inches below its angle. Place the forefinger on the side of the lower jaw at its angle, and trace the jaw along gently towards the mouth. Some four inches below the angle a notch will be found, in which the artery passes over the jaw, and the throbbing of the pulse will be readily felt. Some attention may be required as the pulse beats in health slowly, and often apparently indistinctly.

The pulse makes in the healthy horse from thirty-six to forty-two beats per minute; in spirited lighter horses the latter, and in heavy older horses the former. When the pulse reaches fifty to fifty-five, there is some degree of fever. Seventy-five will indicate a dangerous condition, and few horses will long survive a pulse of one hundred. Care should be taken not to excite a horse before or while examining the pulse, as it may thus readily be increased ten or fifteen beats to the minute, and mislead as to the true condition.

HINTS FOR PRACTICE.

As this Veterinary Manual may fall into the hands of some who are not acquainted with its use, or with any Specific Medicine, a few practical hints may be of service:

1st. Follow the directions.—Read and learn what the disease or condition is.—Then give the Specific *in the doses*, and *at the intervals directed*, as near as may be. Don't think you know more about the doses or *how much* to give, or how often to give it, than the man who originated the system and wrote the book, and whose rules and observations are the result of very large experience.

2d. Don't mix the Specifics with other medicines. They won't act if you mix them up with other things; or bring the patient under the influence of other drugs, however harmless you may suppose them to be. The sure way of safety and success, is to *trust* to the *Specifics alone.* You will not improve the case by resorting to other medicines or other measures. If the patient does not improve as rapidly as you desire, a little rest will do no harm, and the kindly reaction may come on later.

3d. Don't be in too great haste.—Medicines must have time to act, and time to cure. In some cases, such as colics, neuralgias or nervous pains, the evidence of good action is prompt—almost immediately. In others slower, less pronounced, not so decided.

When you see the patient relieved,—*less pain*,—*more quiet*,—*more natural*,—*easier*, then you know that the Specific is *acting curatively*, and *don't interfere with it*, by giving new doses nor other Specifics, or medicines. Simply *let the Specific act. Hurrying does not hurry the cure.* When a good action has begun it will continue faster when quietly permitted to expend its action, than if doses are multiplied upon it. The time to repeat the dose is when the action of the former has ceased or begun to decline. The patient is in more danger from your doing too much, than too little, after a good action has been set up.

4th. Disease of the bones, joints and ligaments, only get well slowly. So of old chronic affections —such as "Spavin," "Founder," "Ringbone," "Wind galls," "Warts," or other blemishes. A new action has to be set up in the implicated part, often a process of absorption and of reformation of tissue, and *time* must be allowed for these changes, through which only a cure can be made. Sometimes a good reaction is only produced after some days or even weeks use of the Specific, Such is nature's way of cure and you cannot hasten it. So your true interest and true philosophy is, act *patiently*, *perseveringly*, if you would act *successfully.*

5th. The action of Humphreys' Specifics continues a long time, even for weeks and months after the *medicine has been given*, especially among such temperate subjects as domestic animals who neither use coffee, tobacco, or drugs or liquors, and whose systems are hence free to act naturally.

PART I.

DISEASES OF HORSES.

CHAPTER I.

DISEASES OF THE SKIN and SUBJACENT TISSUE.

Abscess—Ulcers—Fistulas.

An abscess is a collection of matter. Any tumor softening, or in other words coming to a head, forms an abscess. They are usually the result of injuries, such as a blow or contusion, or may be occasioned by a thorn, nail or splinter entering the flesh. In the more severe cases these act in connection with a constitutional pre-disposition or peculiar state of the blood.

Symptoms.—A hot and painful swelling; in the earlier stage, hard, and by degrees softening or fluctuating in the centre, and gradually approaching the surface, attended with more or less heat and fever, according to its situation and nature.

Abscesses which penetrate deeply along the sheaths of muscles and tendons, or even to the bones are termed fistulas. Shallow abscesses are known as ulcers, and these may be mild, readily healing, and secreting a healthy, thick, cream-like pus; or ill-conditioned, unhealthy, secreting a thin sanious discolored matter, and healing with great difficulty. Such are the general characteristics of all abscesses, wherever located, and their situation and extent mark their relative importance and danger.

TREATMENT.—During the inflammatory stage or before softening, while there is merely a hard, more or less hot and painful tumor, we should endeavor to disperse it without its softening. To this end, give three times per day, ten drops of the Specific, A.A., for INFLAMMATION, and also bathe the tumor as often with THE MARVEL which will frequently disperse it.

But if the swelling increases and fluctuates, or a yellowish spot is observed in its centre, denoting the presence of matter, it should be lanced at once, in the most depending portion, and the matter drawn off, and fifteen drops of the Specific, I.I., for ULCERS be given morning and night to facilitate the healing. Apply the VET. CURE OIL to the cut or open sore with the end of the finger, three times per day, to facilitate the healing.

For ULCERS or SORES, apply the VETERINARY CURE OIL, as above.

Abscess of the Poll, Poll Evil

Is often from neglect a very formidable disease. It is generally the result of severe injury upon the top of the head, such as the chafing of the bridle or halter, pressure, or a blow against the manger or stall, or frequent hanging back against the head-stall.

SYMPTOMS.—At first a tumor forms at the polls or junction of the head and neck. It soon becomes hot, tense and painful; the horse carries his head low; looks to one side; eats but little from the pain of chewing, especially if the food is hard. If the tumor is not dispersed, it comes to a head, either discharges externally, or the matter failing to come to the surface, sinks downward, burrowing along beneath the surface among tendons, ligaments,

and bones, forming deep and obstinate fistulous ulcers.

TREATMENT.—Before the tumor has softened, give the Specific A.A., for INFLAMMATION, fifteen drops three times per day, keep the horse on low diet, and bathe the swelling frequently with THE MARVEL OF HEALING. This course will usually disperse the swelling or should it fail to do so, will limit it to the smallest possible extent.

If the tumor has come to a head, is soft or fluctuating, lance it at once, evacuate the contents, and give fifteen drops of the Specific I.I., for ULCERS, morning and night, apply HUMPHREYS' VET. CURE OIL three times per day to the sore until healed. For old neglected cases apply the VET. CURE OIL, and give SPECIFIC I.I., daily.

Allopecia, or Falling off of the Hair.

Sometimes in animals the hair falls off either in patches or generally. If it is attended with itching and irritation. Consult what is said under the head of MANGE, but in most cases the disease may be arrested, and the hair restored by giving a dose of fifteen drops of the Specific I.I., for ERUPTION, each morning and night for a few days. The loss of hair may be soon arrested, but new growth will be slow.

Anasarca—Dropsy.

This disorder, which is often a mere extension of dropsy of some other part of the system, but may also occur alone, consists of collection of serum in the cellular tissue immediately beneath the skin. It may be known by the *doughy* feel of the part, the pit made by pressure retaining for a time the impression made, and it is usually accompanied by scanty urination, dry skin, and other symptoms of dropsy.

It will generally be cured by giving the SPECIFIC H.H., in doses of fifteen drops three times per day for trifling cases, or ten drops every three hours for the more severe ones. After a free discharge of urine is established, giving the medicine three times per day will be sufficient.

Antichor

Is the name given to a globular inflammatory swelling, sometimes the size of the fist, which occasionally forms on the chest opposite the heart. It is a consequence of cold and straining, and will yield to a few doses of fifteen drops each of the SPECIFIC A.A., for FEVER, repeated three times per day.

Chaps—Cracks.

CAUSES.—Chaps and Cracks in the skin are sometimes symptomatic of internal disease, and should be treated in connection with the primary disorder; they are also due to long walking on marshy ground, and sometimes to the application of strong caustics.

TREATMENT.—The remedy most commonly useful in recent cases, when there appears to be a necessity for internal medication, is SPECIFIC I.I., which will be found useful when the skin is dry and hard, and peals off, leaving new cracks underneath. The VET. CURE OIL is useful, when the hardened edges contract in wrinkles and ridges; apply morning and night.

Cysts.

Cysts are indolent tumors of different sizes, free from hair, which appear on different parts of the body.

TREATMENT.—The Specific I.I., given morning and night will be found very useful, and will prove curative.

Eruptions—Exanthemes.

There are various forms of Exanthematous diseases to which men and animals are subject, and which have been most elaborately arranged and classified by writers who have devoted themselves to this particular subject. They are, however, of little value to us in a practical point of view, as these distinctions are often too intricate to be folfollowed by the amateur, and lead to no practical difference in the treatment.

Eruptions may be due to some constitutional disease; but they may also arise from insufficient, improper, or excessive food; or from certain insanitary or atmospheric conditions. Sometimes they are local, sometimes general about the body; in some cases easily cured, in others inveterate. They appear in a great variety of forms, as spots, pustules, vesicles, tubercules, scabs, and scales. They may be ACUTE or CHRONIC, DRY or SCURFY and attended with ITCHING and BURNING; or MOIST and SECRETING matter.

These may also be divided into three varieties, namely, *Scurfy*, *Pustular*, and *Papular*.

The first two appear to be identical in their nature and origin. They consist of a number of very small elevations, occurring most frequently on the neck and quarters, some of which are hard and dry, and, when removed or cut into, are found to be composed of a chalk-like substance, with a scaly or scurfy envelope; while others assume a vesicular form and burst, discharging an adhesive fluid which mats the hair over them, after which they dry up and disappear.

The Papular Eruption is characterized by the suddenness of its disappearance and decline, and is most frequent in hot weather, and in over-fed horses. It consists of a number of irregularly shaped lumps, varying in size from a pea to a walnut; while others are flattened, and cover a space as large as the palm of the hand. They are dispersed in groups over the trunk and neck, and do not run in lines like Farcy buds. Their shape is also different. Sometimes these lumps become soft in the centre and discharge a glutinous fluid, but more commonly they disappear by resolution as suddenly as they came. In some cases febrile symptoms are present in a marked degree; but in others no constitutional derangement is discernible, although we feel convinced that it is present in all.

CAUSES.—These may generally be found in change of food, or suppressed perspiration from drinking cold water when heated. Eruptions may also be an effect of over-feeding and insufficient work, or of indigestion.

TREATMENT.—These varied forms of eruptive diseases are successfully treated by the proper Specific, administered as an external remedy and only rarely require the use of any external application. This treatment is not only more successful but also more safe, as a violent or severe application to the surface may drive the disease to some internal organ, where its location would be more dangerous as well as more difficult of cure.

Simply give SPECIFIC I.I. morning and night, or when the case is not urgent, only at night; and daily apply the VETERINARY CURE OIL to the surface with the end of the finger. The

oil need only be applied when the patches or eruptions are *small.* or *sore* or *ulcerated.*

For PIMPLES *which form on the surface*, scale off and fall in a powder or scurf, give fifteen drops of the ERUPTION SPECIFIC, I.I., every night and morning.

For dry eruptions, with disequamation or branny scaling off of the skin, give the same dose and repetition.

For sudden Itching after a cold, the same.

Moist eruptions, where there are blisters (vesicles), or pustules which rise above the skin, break and secrete a fluid which is poured upon the surface, forming crusts and scabs, and is attended with very troublesome itching, require a dose of fifteen drops of the same Specific, I.I., three times a day. In any form of eruption attended with heat, burning and great uneasiness, the dose should be given more frequently, and to relieve the anguish and fever, a few doses of the FEVER SPECIFIC, A.A., may be given from time to time between the doses of I.I. with most excellent effect.

Fistulas.

Abscesses which have a small opening with a straight or sinuous canal, burrowing along beneath the surface, among the muscles, tendons, sheaths, and even bones, are called FISTULAS. They are distinguished according to their location, extent, and general characteristics, as follows:

FISTULA in the NECK, or Poll Evil; fully described in a preceding page, under that head.

VENOUS FISTULA, from inflammation along the course of a vein, from blood-letting.

FISTULA IN ANO; from docking too near the anus, and improper treatment.

FISTULA of the CORONA; generally on the inner side of the corona or frog of the foot, and if the disease lasts some time, the entire hoof becomes affected and altered, the animal becomes lame, and walks upon the toe.

SALIVARY FISTULA; which sometimes occurs in the salivary duct, where it passes round the edge of the posterior jaw.

FISTULA of the WITHERS; which is situated where the neck and back unite, and is of the most formidable character, and may even endanger the life of the animal, from the pus sinking down and extending to vital parts beneath, called "Sweeny."

DENTAL FISTULA, on the lower border of the lower jaw, sometimes on the outer surface, is frequently very painful, so that the animal refuses to eat and grows thin.

The above are the more common forms of Fistula, and the general character, causes, and treatment, are much the same, wherever located.

CAUSES.—In almost all cases, Fistulas are the result of some external injury, such as a *blow*, *strain*, *chafing*, *pressure*, etc., which, acting upon some dyscrasia or predisposition of the system, results in inflammation, suppuration, abscess and subsequent burrowing to a fistulous opening.

TREATMENT.—In case there is heat and feverish irritation, the FEVER SPECIFIC A.A., should be given a few times, in doses of fifteen drops, three times per day, after which the Specific for ULCERS, FISTULAS, etc., I.I., should be given, in like doses every night and morning, except that in very old cases one dose every day is better.

In cases where the canal is long and crooked, or runs into cavities of pus, it may be laid open with the scalpel, so as to heal from the bottom.

Or better, the VET. CURE OIL may be injected daily, with a small syringe, or the OIL may be inclosed in a *gelatine capsule* and gently pressed down into the bottom of the cavity, after having pressed out the accumulated matter. The use of the capsule (which may be had for a trifle at the druggists, or from this Company), is the safest and most convenient, and under such treatment even the most extensive fistulas are daily cured.

Cracked Heels, Grease or Scratches.

The skin of the heels of a horse has this peculiarity, that in a healthy state it secretes a greasy or oily matter which lubricates the surface, and renders it soft and pliable as well as protects it in a measure from dirt and moisture. Often, however, from want of attention, and especially in coarse animals, fever intervenes, the secretion is arrested, and the skin becomes tense and dry, red, and scurfy. The action of the joint being continued, cracks or fissures form in the skin, and a liquid is discharged profusely from the pores of the heel, at first, clear like water, then thicker, turbid, greasy, corroding the skin and roots of the hair. The inflammation and pain make rapid progress; the animal cannot bear the slightest touch, limps in walking, and when at rest holds the foot off the ground. Swelling, heat, dryness, redness are the first stage; profuse moisture, cracks, and deep clefts, the second. Sometimes, in very bad and neglected cases, a yet more serious stage ensues. The ulcerations extend over the entire heel and fetlock, and in the deep clefts, which occur, and gradually extending out

over the surface, *fungi* spring up, which are unhealthy vegetations and are highly sensitive, readily bleeding at the slightest touch, and interspersed with scabs. Gradually these vegetations are covered with crusts or a horny substance, protruding in the form of knots, and collected together in bunches, termed GRAPES. A fetid and peculiar exhalation arises from almost the whole of this unnatural substance. The horse suffers much, and is gradually worn down by the unnatural drain.

CAUSES.—Almost invariably the disease may be traced to want of proper care and attendance, permitting the horse to stand for days in his own litter, or his legs covered with mud; irregular work, legs much exposed to wet and mud; or working in water; add to this a tendency in some animals and families of horses to this disease. In these cases the tendency to the ulcerative form is very strong.

TREATMENT.—Regard must be had to cleanliness and diet. Remove the hair from the sores, and cleanse them well with soap and warm water. In bad cases the application of a bran poultice, as noticed on page 30, cleanses them beautifully. Keep the legs as dry as possible. Feed with relaxing or green food, bran mashes, and less stimulating food, especially in the early stage, and give fifteen drops of SPECIFIC A.A., and repeat the dose three or even four times per day. Later the SPECIFIC for the ERUPTION I.I., may be given in alternation with the SPECIFIC A.A., in severe cases two doses of each per day, in old or milder cases, A.A. morning, and I.I. at night. Keep the leg as free from dirt as possible. If the horse is not worked, let him have exercise daily, and each night and morning apply, after the leg is cleaned, HUMPHREYS' VETERINARY CURE OIL,

When *grapes have formed*, that is, unhealthy vegetations have sprouted out in deep cracks, occasional poultices of turnip or bran are useful to cleanse the part, after which the application of the VET. CURE OIL, and SPECIFIC I.I., morning and night.

CRACKED HEELS is but another form of the same disease, and requires the same treatment

Fungus

Is a term often applied to indurations or hardened places in the skin, occasioned by the strong and continued pressure of harness. Apply HUMPHREYS' VET. CURE OIL, night and morning, and give the Specific for ERUPTIONS, I.I., night and morning, a dose of fifteen drops. Fungus excresences about the foot require the same treatment.

Induration of the Skin.

Hardening and tightness of the skin, when it is not the result of chafing of the harness, or external pressure, will yield to the alternate use of the Specific for ERUPTIONS, I.I., and that for INDIGESTION, J.K., a dose of fifteen drops repeated morning and night, giving the J.K. at night and the I.I. mornings.

If the induration is the result of chafing or pressure, apply the HUMPHREYS' VET. CURE OIL daily, and use the medicines mentioned above internally one dose daily in alternation.

Goitre.

This unsightly tumor is an enlargement of the gland on the side of the neck, generally the left side; it is sometimes acute, sometimes chronic, and obliges the beast to carry its head upward and outward. When acute, it is very painful, the attendant cough is distressing, and the animal bellows hoarsely, with evident suffering. Specific C.C. will be useful, given twice per day.

Hidebound.

This condition is not a disease of itself, but a mere symptom of some other disease, most frequently of the stomach; such as a disordered stomach; poor food, or long exposure to rough, stormy weather. It not unfrequently exists in connection with Glanders, Grease, Founder or old disease of the lungs.

SYMPTOMS.—It manifests itself by the hair looking rough and unthrifty, without its natural smoothness and gloss; and the skin feels hard, firm, and fixed to the flesh.

We can most successfully treat it by ascertaining and removing the cause upon which it depends. But in the absence of any special indication, we may give with the best success a dose of fifteen drops of the Specific for INDIGESTION, J.K., each morning, and the same of the Specific for ERUPTIONS, I.I., each night. A few days treatment will generally produce a most marked improvement

Mange, or Itch.

This disease, which occurs in all domestic animals, especially the horse, sheep, and dog, much resembles and is probably the same as the itch in the human subject. It may be dry and pimpled, or vesicular and moist. It first appears on the neck at the roots of the mane, thence to the back, loins, neck, buttocks, shoulders, thighs, etc., and consists of small pimples itching violently, and causing the animal to scratch and rub itself incessantly, thus soon denuding the parts. In the dry variety, the parts seem covered with a whitish dust, and the eruption constantly spreads more and more. The moist variety consists of pimples, changing at times to pustules, which break and discharge a fluid, forming crusts or scabs, which peel off, leaving bare and

sore spots. This process extends by degrees, and is attended with intolerable itching and irritation, until the entire system is more or less involved.

The animal grows thin in spite of good appetite, and unless cured, mange may continue for years, terminating fatally in some form of disease, such as dropsy, consumption, etc.

Old, badly-kept horses, and emaciated cows are especially liable to it. Sheep have it in a variety of forms. Among hogs it is quite common and most readily cured, while it is most obstinate in the case of dogs.

It is a decidedly infectious disease, and among horses is generally the result of infection, being communicated by the curry comb, brush, blanket, or by rubbing the same stall with an infected animal.

It may also arise spontaneously from spoiled or scanty food, or from damp stables, bad keeping, and poor attendance.

TREATMENT.—The horse should be so kept as not to communicate his disease to others, and be most carefully groomed and attended with a suitable allowance of good diet, and morning and night give fifteen drops of the Specific, I.I., for MANGE. Procure also one or two pounds of good flour of Sulphur, and constantly dust this in the curry comb, brush, and cloth, used about the horse, and also in obstinate cases a table-spoonful may be stirred in a bucket of water and given daily. A wash of soap-suds, sulphur, and water may be applied every two or three days to accelerate the cure. If any ointment is deemed necessary, HUMPHREYS' VETERINARY CURE OIL is the best. Keep the mercurials away from the horse. In obstinate cases HUMPHREYS' Mange Lotion as prepared by this Company, is very efficient, and may be applied daily for three days, then

intermit for a week, and again apply the lotion if needful, until cured.

Swelled Legs.

This affection is of frequent occurrence in horses, and is more especially observed in coarse and badly groomed animals. The hind legs are most subject to it, although it frequently extends to the fore legs. Sometimes from metastasis of disease from other parts, the legs swell to an enormous degree, and it is attended with some degree of heat, tenderness, and peculiar lameness. The pulse is quickened, and there is evident fever. In such cases there is some inflammation of the cellular tissue, and an effusion of fluid forming the swelling. In these cases when there is heat and tenderness, a few doses of fifteen drops each of the Specific, A.A., for Fever will soon relieve the lameness and swelling. If the legs are swelled without being lame or painful, the Specific, I.I., for ERUPTIONS, should be given morning and night, with careful grooming and exercise, this will soon reduce the swelling. If the swelling is accompanied with Scanty Urination the Specific H.H., given three times per day is the proper Specific for the difficulty. Sometimes swelled legs are merely the result of a change of feed, and hence often occur in spring and fall, or when horses are taken from pasture and confined in close stables. Consult also GREASE or SCRATCHES.

Swelling of the Teats.

Sometimes from cold or injury, the teats in mares are subject to inflammatory swelling. A few doses, ten drops each, of FEVER Specific, A.A., will relieve, and if the parts seem quite tender, bathe them with the MARVEL OF HEALING, or apply VET. CURE OIL.

Itching of the Mane and Tail.

This is usually caused by neglecting to keep the roots of the mane and tail clean. It is easily removed by washing them with soap and water, and then applying HUMPHREYS' VET. CURE OIL night and morning, or better, give SPECIFIC I.I. at night, and apply the MANGE LOTION.

Psoriasis—Mallenders and Sallenders.

DEFINITION.—A scurfy eruption—the former on the back of the knee, and the latter in front of the hock. It seldom causes lameness, but is unsightly, and should, therefore, be removed.

CAUSE.—Bad grooming, or washing the legs and not drying them properly.

SYMPTOMS.—When presented to our notice we observe either cracks or a scurf on the bend of the hock or the back of the knee, attended with itching and sometimes lameness. Previous to this scurf there might have been observed a vesicular eruption with a slight oozing of limpid fluid, which, drying on the surface and mixing with particles of cuticle and dirt, forms a scab and sometimes ulceration, resembling cracks at the heels.

TREATMENT.—Specific I.I. is the proper remedy, and may be given morning and night, in the usual dose. If raw or sore, or with cracks, even deep and ragged, apply daily the VET. CURE OIL.

Tetter—Ringworm.

DEFINITION.—An eruptive disease of the skin of a specific character.

CAUSES.—Contagion, or constitutional derangement.

SYMPTOMS.—Of this disease there are two forms, the one dry and the other humid.

The dry tetter consists of a number of small pimples arranged in a circular form, from one to two inches in diameter, and with raised edges, on some portion of the skin, usually on the neck, shoulder, or quarters. They are attended with itching, desquamation of the cuticle, and falling off of the hair in circular patches. These pimples usually disappear by resolution, and nothing remains but a cuticular scurf and loss of hair. In others, the part becomes raw from the animal's rubbing himself; and the sore, if neglected, takes on an ulcerous character.

The humid tetter, consisting of pustules or vesicles, also occupies circumscribed patches, on which the hair becomes matted by a glutinous discharge from the pustules. A crust is thus formed, which is easily detached by the finger, exposing a raw surface. If we now examine the latter with a magnifying glass, we find that a pit remains where the vesicle has burst. Some of these little cavities are filled with purulent matter, which, if long pent up by the incrustation, has formed an ulcer with an elevated edge and sloughy case. The incrustation seems to be formed of hair, scurf, and a glutinous fluid.

TREATMENT.—The same as for Psoriasis; the Specific, I.I., morning and night, and the application of the VET. CURE OIL, if sore or inflamed, or ulceration.

Lice.

Horses taken up from a straw-yard, with long, shaggy coats, and in poor condition, are sometimes found infested with lice.

CAUSES.—Poverty of condition, dirt, and contagion.

SYMPTOMS.—The animal is seen continually biting his sides and quarters, and rubs himself against walls and posts, or anything within his reach, denuding the skin of hair in patches, and making it bleed. On close examination we have no difficulty in discovering the lice in the bare patches, and fortunately there is no difficulty in destroying them.

TREATMENT.—An application of INSECTICID OIL, prepared by the HUMPHREYS' MEDICINE COMPANY, applied once in two or three days, is usually sufficient. A strong decoction of tobacco water likewise destroys them.

Tubercles.

These small, sluggish swellings are caused by friction, contusion, cold, stings of insects, internal disease, etc.

TREATMENT.—If they are the result of external violence, *Arnica* or the VET. CURE OIL, applied externally, is beneficial. The Specific I.I. may be given with advantage morning and night.

Sponge.

This term is given to a round, spongy excresence on the knee, generally caused by some external injury. It is at first a hot, painful swelling; then becomes a cold, hard, indolent tumor. It sometimes occasions considerable itching, and emits purulent matter.

TREATMENT.—If sponge arises from injury, Arnica lotion should be well rubbed in two or three times a day; or better, the VETERINARY CURE OIL may be applied morning and night; at the same time, also administer Specific I.I. morning and night.

Sweating.

Sometimes, on very moderate exercise, horses sweat to excess. It is often the result of weakness, poor food or some internal condition. Give the Specific for INDIGESTION, J. K., a few times in doses of fifteen drops morning and night. It will generally relieve.

Surfeit.

This is not an uncommon disease in horses, and arises from some obscure internal condition, in connection with the sudden changes in the kind and quality of his food; such as violent exercise or overheating; checked sweating in a draught of air; drinking cold water after work; or sudden changes in the weather. It is similar to the NETTLE RASH in people, produced by similar causes, and runs a similar course.

There are two forms; the *first* attended with great itching of the skin, compelling the animal constantly to rub himself; the hair becomes rubbed off in several places, which are covered with a bloody scurf, or fluid of a reddish color; the skin in other places is warmer than in health; the hair is rough and unthrifty; the legs are perhaps swelled, and the horse becomes dull and weak.

In the second form, there appear upon the skin many small and hard, or large and flat lumps or swellings, which go away as quickly as they come. They may come over the whole body or only on the neck, quarters, sides, and shoulders. In other respects the animal seems well.

TREATMENT.—Give the Specific for ERUPTIONS, I.I., fifteen drops each morning, and fifteen drops of the Specific for INDIGESTION, J.K.. each night. A few doses will generally cure.

Tumors, Swellings.

Any unusual or morbid growth or enlargement may be termed a Tumor, and when one is found upon any part of an animal, care should be taken to ascertain, if possible, its nature and cause. They are variously named, according to their locality and the nature of their contents.

Sometimes they are globular or conical, or again flattened, or again pedunculated (having a neck). Some are quite firm and hard, others spongy, and others contain fluid.

The principal varieties are *abdominal tumor*, which extends along the abdomen, and should not be confounded with dropsy or with pregnancy.

Tumor of the chest, which, in case of the horse, is situated over the heart, is about the size of a fist, and is hot and painful. (See Antichor.)

Swelling of the feet is common among cattle and horses, and may be either hot or cold.

Swelling of the scrotum, accompanied with fever, is hot, and is liable to produce unpleasant consequences.

Swelling of the head may occur in various portions and degrees.

Swelling of the Sheath, which may become indurated by neglect.

Tumor at the point of the elbow, which is of various sizes, globular, and may attain the size of a child's head, is soft and somewhat hot. It is caused by the pressure of the shoe or by an uneven pavement while lying. After a time it becomes pendant, cold, insensible, and filled with yellowish fluid.

Tumors may form upon the edge of the eyelids, from some internal cause.

Encysted Tumors (so called because the enlargement is closed in a sack) are frequent, more or less

round, movable beneath the skin, painless, and sometimes attain to a considerable size. They are the result of some internal cause not easily defined.

TREATMENT.—In all cases where a tumor or swelling is hot or painful, give the FEVER SPECIFIC A.A., every two, four or six hours, in doses of fifteen drops, according to the urgency of the case. Keep the animals on low diet and thus seek to disperse it. If caused by external pressure or injury, annoint the part frequently with the VET. CURE OIL. If the tumor, notwithstanding the treatment has softened, grows whitish at some point, painful and smaller, open it, then treat it as an ulcer, giving the Specific for Ulcers, I.I., morning and night until healed.

In case of *cold tumors*, or hot tumors, after the heat has been reduced, simply give the Specific for ULCERS, I.I., at night, or noon and night, and the CONDITION SPECIFIC, J.K., in the morning, in doses of fifteen drops, until the tumor is dispersed or the condition favoring the production is destroyed. Encysted and fatty tumors will generally have to be taken out by the knife, and the opening annointed with the VET. CURE OIL, and again neatly brought together and healed to prevent a scar.

Warts.

Warts are so well known as to require no description. Certain horses and young animals are most subject to them. They vary in size and appearance, are smooth or shaggy, pedunculated or have a large base, and some are soft, moist, spongy. They sometimes arise after chafing or an injury, but depend essentially upon an internal cause.

The ERUPTION Specific, I.I., given in doses of fifteen drops every two or three days, for a few weeks, should cause their entire disappearance. Apply also daily the VET. CURE OIL, scraping off the rough outside of the wart with the thumb nail before or while applying the Oil.

Scarletina,—Scarlet Fever.

This disease occasionally appears among horses, and is sometimes quite serious. It is generally preceded by what seems a catarrh—slight feverish condition, some running at the nose, and cough. After from three to six days the hair about the neck, the fore and hind limbs will be *elevated in blotches*, while the legs will be somewhat swelled. These blotchy elevations are not large but are characteristic, and the hand passed gently over them will feel the elevation in the skin. The mucus membrane of the nose has *scarlet spots* of variable size upon it. The pulse is usually increased, and there is *sore throat.* This constitutes the usual mild form of the disease which will pass off safely in a few days with the use of SPECIFICS A.A. and I.I.

But the disease sometimes from the first assumes a *more severe* or even *malignant form*, or the simple form from neglect or bad management may run with it, presenting these symptoms.—SEVERE SORE THROAT, HIGH FEVER, COUGH FROM IRRITATION OF THE LARNYX, DISCHARGE OF PURULENT MATTER FROM THE NOSTRILS AND GENERAL DEBILITY. This may run on for a time, when suddenly the whole changes—the legs swell with an even swelling which extends over the entire legs or appears in lumps and masses, which are large and numerous as well as hot, hard and painful. Other portions of the skin, free from the swellings, have the blotchy elevations common to simple scarletina. The membrane of the nose becomes covered with large size spots of an intense scarlet color, and the nostrils discharge blood or purulent matter and serum—sore throat, excessive difficulty of swallowing, cough severe and suffocative. pulse very high, from 90 to 100, and weak and

feeble, limbs swelled and very tender, and the horse can scarcely be made to move at all.—Later, upon the surface or about the joints, large blisters appear which burst, leaving corroding sores; on other parts the skin becomes dry and hard, then peels off leaving a raw supperating surface; no appetite, constipation, scanty, thick urine; and the patient becomes a loathsome object.

These severe cases are unusual. In the mild cases the fever abates in three or four days, while in the more severe cases it may run eight or more days, and the case becomes complicated with rheumatism, congestions to the lungs, or a low typhoid condition.

CAUSES AND CONTAGION.—Young horses and colts are liable to have it more severely than old ones and when it exists in a stable, or when horses have the Influenza or a cold, their exposure to cold or wet, or being overdriven is liable to develop a case of scarletina. It is generally regarded as an "epizooty" depending upon causes not fully understood. Is is not generally supposed to be contagious, at least not so in a high degree. Yet it would be unwise to put a young horse or colt into a stall or box where there is or recently has been a case of scarletina, without a previous thorough cleaning of the same. Stablemen or grooms attending sick horses with the disease would not be liable to take it, but such men should be cautious about going from the handling of such diseased animals, and then without washing, going home and then tending or romping with their infant children, as infection might by such means be conveyed.

TREATMENT.—SPECIFIC A.A., for FEVER and INFLAMMATIONS, and the SPECIFIC C.C., for SORE THROAT, are the remedies. Give at first the Specific

A.A., a dose every three hours by day—after the first day or two alternate the SPECIFIC I.I. with the SPECIFIC C.C., a dose once in four hours.

If the legs are much swelled, or if the urine is scanty give the SPECIFIC H.H., which continue either alone or in alternation with the A.A., if there is yet much *fever and heat*, or with the C.C. if the fever and heat has gone down. The SPECIFIC I.I. for SKIN DISEASES is the remedy to wind up the disease and prevent bad after results. The kidneys must be kept active in order to carry off the morbid products of the disease, and if not active must be stimulated from time to time by giving the SPECIFIC H.H. for the KIDNEYS.

The use of the above Specifics may be relied upon with confidence here as elsewhere.

Vermin.

Animals occasionally are subject to insects which fasten upon the skin and cause great annoyance from the itching they occasion. Horses, after having run out for winter, on being taken up in spring in poor condition with long rough coat, almost invariably are troubled with them. They are best and most safely destroyed by an infusion of tobacco water, or of HUMPHREYS' INSECTICID OIL. A dose or two of the SPECIFIC I.I. will also be of value as promoting the health of the skin and the growth of the hair.

CHAPTER II.

MECHANICAL INJURIES AND WOUNDS.

The treatment of wounds and injuries is a branch of veterinary surgery of the utmost importance to the owners of horses, for accidents are of every day occurrence. We shall, however, not be able to devote so much space to the subject as some would deem desirable.

Flesh Wounds may be classified as *Contused Wounds*, when there is an injury inflicted on the surface of the body by mechanical violence without rending the skin ; *Incised Wounds*, when such an injury is inflicted by a clean-cutting instrument ; *Lacerated* or *Jagged Wounds*, when the parts are torn and the lips of the wound are irregular ; and *Punctured Wounds*, when the injury is deep rather than broad, and the effect of piercing as by a stab.

Contused Wounds.

DEFINITION.—Wounds are said to be "contused" when the skin, although abraded, is not cut through or broken; they are followed by the usual symptoms of inflammation, namely, redness, swelling, heat and pain.

CAUSES.—These can be best understood by one or two illustrative examples. A horse gets the collar chain round his heels at night when he becomes fast, and, in struggling to free himself, he bruises and excoriates the hollow of the pastern. Next morning he is found very lame, with swelling and great tenderness of the parts, but there is no rent in the skin. He has what is called "Contused Wound." Or, another cause of injury commonly occurs in cavalry stables, where the horses are separated from each other by an iron bar, over which one of them manages to get one of his hind legs. In struggling to get back, he bruises the inside of his thighs, and probably his belly as well. Next day we find him with his leg considerably swollen, lame, and tender on pressure, from "Contused Wounds." Other causes are kicks from horses, blows from bad-tempered grooms, and falling on hard ground.

TREATMENT.—Apply the VET. CURE OIL to the part two or three times per day, and give the first day or two, the Specific, A.A., three times per day, after which, an occasional dose of I.I.

Incised Wounds.

DEFINITION—Incised wounds are those in which a clean cut is made through the integuments or parts underneath, merely dividing the textures without lacerating them, and are generally caused by some sharp instrument.

TREATMENT.—In such cases it is necessary to bring the lips of the wound together, and retain them so by what are called sutures, the best of which is an ordinary pin passed through the skin a quarter of an inch from the edges of the wound, whose lips are then kept close together by the further addition of a small piece of tow passed over, under and

around the pin, forming a figure thus $, after which the point of the pin may be cut off with a pair of scissors. These pins, or, as they are called, "twisted sutures," may be placed one inch apart from each other. Most veterinary surgeons use what is called the "interrupted suture," as follows: A curved needle, armed with a strong thread, well waxed, is passed through the skin on each side of the wound, when the ends of the thread are drawn together and tied in a common knot. As many of these stitches are to be made as the length of the wound renders necessary, but they should be about three-quarters of an inch apart. These sutures, as a general rule, should be allowed to remain as long as they will; but should an effusion of serum or matter take place in the interior of the wound, the lower or most dependent one should be taken out, and the fluid allowed to escape; and then, but not before, warm fomentations may be applied. Exceptional cases, however, do occur when, from the extent of the injury, considerable swelling takes place about the third day, and constitutional disturbance intervenes. In these cases the sutures may be removed; but in the majority, the swelling must be looked upon as a natural consequence attendant on the formation of lymph, which may be seen oozing from the lips of the wound, and which is necessary to glue them together, till the small vessels pass from side to side and form a permanent bond of union. Always dress the wound and keep the edges of the opening moist with the VET. CURE OIL, applying it from day to day, to prevent inflammation suppuration and to promote healing by "first intention." The interrupted or thread suture is preferable for wounds about the head, as

the horse would most probably tear out the pin by rubbing it against the rack or manger. Previous to applying sutures, we should remove all foreign bodies and clots of blood from the wound, and oil every part well with VETERINARY CURE OIL, and give SPECIFIC A.A. four times a day.

Hemorrhage, although causing great alarm to the uninitiated in veterinary science, is generally a matter of very little consequence, except a large artery is divided, as the bleeding will soon stop without our assistance. But should the blood come in jets, be of a bright scarlet color, and not stop in a reasonable time, we should either sieze the open mouth of the vessel with forceps and pass a ligature around it or apply a compress of tow and a bandage. Cold water dashed on the part, or strong alcohol, will frequently have the desired effect. If the loss of blood be considerable, a few doses of I.I. will relieve the consequent debility.

Lacerated or Jagged Wounds.

DEFINITION.—By these are meant that description of injury to the soft parts where the skin and subtextures, instead of being simply divided, are torn asunder and present a jagged and irregular appearance, and are often much bruised.

CAUSES.—They are caused by mechanical injuries, such as hooks and nails in stables, or by carriage poles or shafts running into a horse.

TREATMENT.—Our first object is to remove all foreign bodies from the wound, and to cut off all lacerated portions, whether of skin, muscle or tendon, which cannot be retained in their original position. Then all grit or sand must be washed away by dashing cold water on the wound, should there be much hemorrhage; or bathing it with warm

water, should the bleeding be inconsiderable. Having thus produced a tolerably even and clean wound, and removed those parts which we know would be removed by sloughing, we assist nature by sewing up such portions of skin and muscle as are not too much injured to preclude the hope of their growing in their original position, although we may abandon all hopes of the wound uniting by the first intention. This we accomplish by thread sutures, as in the case of incised wounds, but with this difference, that we do not bring the lips of the wound together, but at once have recourse to fomentations and bandages wherever they can be applied. The use of the latter is to preserve the lacerated parts in their original position, to exclude air, and to prevent the water washing away the lymph, which is necessary for the filling up of the wound; consequently the bandage should not be removed for a few days, except that the swelling renders it actually necessary to do so. The warm fomentation reduces the tension in the part, favors circulation and the exudation of lymph, and by its soothing effects prevents that constitutional disturbance which is so much to be dreaded in this class of wounds. In about a week the inflammation will have partially subsided and suppuration will most probably have taken place, when we remove the bandage and discontinue the fomentation, merely letting a little water run over the wound to remove superfluous matter. It is undesirable to use a sponge, because it would remove the lymph at the same time and expose the small vessels to the atmosphere, which are busily engaged in repairing the injury, which, acting on them as an irritant, causes them to secrete exuberant and unhealthy granulations called "proud flesh." For the same reason, unless the

matter is very plentiful and has a bad smell, it is better not to apply even water, or in any way remove the lymph.

The best possible dressing for all such injuries is HUMPHREYS' VET. CURE OIL, which should be applied to all the raw or cut surface before being sewed or bound up, and then kept applied to the raw surface, both to prevent inflammation and to promote healing, and to hasten the process of cicatrisation, or the skinning over of the wound. Apply the VET. CURE OIL twice per day. Should the granulations rise above the surrounding skin, or "proud flesh" appear, VET. CURE OIL is still the best application, and will soon reduce the unhealthy growth and induce a natural healing.

Punctured Wounds.

DEFINITION.—These have small openings externally, but are usually deeper and of a much more serious nature than others. Because from their depth they are liable to implicate blood-vessels, nerves, viscera, and other deep-seated parts of importance. And because the parts which they traverse are stretched and torn, and consequently disposed to inflame and suppurate. And because matter, when formed, has no free exit, and is liable to burrow extensively. Finally, because foreign bodies may be carried into great depths without being suspected, and create long continued irritation, and because they are most liable to be followed by Tetanus.

CAUSES.—These wounds are caused by any sharp-pointed instrument, such as pitch-fork, nail or scissors, or by stabs or thorns, bayonet or sabre thrust.

TREATMENT.—Our first object is to remove all foreign bodies, such as splinters, thorns, or balls, should it be a gun-shot wound. Should the puncture not be in the neighborhood of a joint, or penetrating a tendon, or bursal cavity, it is then generally advisable to enlarge the orifice of the wound by passing a director to the bottom of it, and with a probe-pointed bistoury to convert the punctured into an incised wound, when it must be treated by injecting the VET. CURE OIL in all cases where it is possible to do so, and in all cases by keeping the OIL applied to the open wound or sore until it is entirely healed. Give also SPECIFIC A.A. morning, noon and night.

When a tendon is punctured, and the thecal fluid escapes, the nature of the injury in no way differs from an open joint in the mode of treatment to be pursued, which will be found fully explained in the Section on open joint,

Laceration of the Tongue.

This wound may be caused by a high port bit, by the forcible and careless administration of balls and drinks; by the end of a halter being passed over the tongue to guide the horse instead of a bit; by a fall when the tongue is between the incisors; by rough, long or irregular teeth; by thorns, sharp bones, needles, etc.

SYMPTOMS.—Slavering from the mouth and inability to feed will lead to an investigation of the mouth, when the laceration can be plainly seen.

TREATMENT.—Foreign bodies should be removed. The horse should be fed on green food, if it can be procured, and no bit put in the mouth for some days. The best application is the VET. CURE OIL applied daily. If ulcers form, SPECIFIC I.I. should be administered also.

Fistula of the Withers--Sweeny.

This disease very much resembles Poll Evil in the textures involved and the difficulty in curing it. It begins with an inflammation of the connecting tissues of the spinous processes of the dorsal vertebræ and the ultimate formation of an abscess. Being confined by the fascia or ligamentous structures, the matter cannot find its way to the surface, but forms sinuses or pipes, and by the force of gravity, burrows down among the muscles which connect the shoulder with the trunk. Sometimes it consists of a cyst filled with a serum, and then is easy to cure. As the muscles of the withers are connected with all the movements of the neck as well as the back and legs, the disease rapidly increases, and the inflammation extends; the shoulder becomes lower, the ligaments, cartilage, and spinous process are involved, and extensive mischief ensues.

Cause.—A badly fitting saddle, and most commonly a side-saddle, which, pressing on the spinous processes of the vertebræ, produces first soreness and subsequent inflammation.

Symptoms.—Swelling and tenderness either on the top of the withers or a little on one side of the spinal process at that point; and in a short time fluctuation under the finger. Should the skin have been much bruised, a circular portion sloughs out and leaves an unhealthy looking sore, from which there is a discharge, and on further examination with a probe we find a cyst from which there is only one outlet, or we find fistulous ducts ("pipes," in farriers' language) leading in various directions. In many more advanced cases we only discover a hard tumor on the withers, which will neither suppurate nor disappear by resolution, and to which, although coming under the head of Fistulous Withers, the term is evidently inappropriately applied. (See treatment on page 114.

Saddle Galls—Warbles—Sitfast—Serous Cyst.

DEFINITION.—When the saddle or collar has galled the skin of the back or shoulders, effusion takes place into the tissue underneath. If a small circumscribed tumor is the result, we call it a "Warble"; or, if a large flat swelling with abrasion of the skin be found, the name of "Saddle Gall" or "Harness Gall" is given to it.

CAUSES.—These disorders often arise from an ill-fitting saddle or collar, but they are also frequently caused by removing the saddle too soon. After a march, dragoons are therefore not allowed to strip their horses until they are quite cool under the saddle.

TREATMENT.—Apply the VET. CURE OIL morning and night, and give SPECIFIC I.I. as often.

Staking.

In leaping fences or gates, the belly of the horse is sometimes impaled and wounded. The extent of the injury is not always apparent outwardly, and can only be ascertained by careful examination with the finger. There may be no wound in the skin, but the muscle underneath may be injured and torn, and the bowel may enter the part torn; or the stake may pierce the abdemen and a portion of the bowel may protrude outwardly.

TREATMENT.—In the former case, a well fitting pad must be made and bandaged on; the bandages or pad being well oiled with VET. CURE OIL.

In the latter case, the horse must be kept quite still, and treated where he is. The protruding bowel must be gently and carefully washed from all blood, dust and grit with warm water, then oiled and replaced by very gentle pressure. The lips of the

wound must then be oiled and drawn together and kept in place with pins A pad saturated with the VETERINARY CURE OIL should then be placed on the wound and kept in place by a bandage round the body. If the bowel itself is wounded, it must be stitched with catgut ligatures, and then replaced. If this is impracticable at the time, a pad and bandage should be placed on the injured part until surgical aid can be obtained.

As there is considerable danger of inflammation, Specific A.A. should be given in ten-drop doses at two-hour intervals. The horse should be kept quite quiet and fed sparingly on soft food.

Capped Elbow.

This is a swelling formed at the point of the elbow, consisting of an infiltration of bloody serum, and thickened skin. It may be the result of a blow, but is most generally caused by the horse in so lying that the calks of the shoe press upon the elbow joint. In some cases, inflammatory action sets in, and the tumor softens and is discharged, or if the pressure is continued, the swelling becomes hard and firm.

TREATMENT.—When the injury is recent, foment it with hot water three times per day, and after each fomentation apply the VET. CURE OIL. Alter the shoe by removing the calks and smoothing the shoe, as far as possible, to prevent any further irritation. Should it have become soft, and matter formed, it should be treated as an abscess.

Capped Hock.

This form of injury most frequently results from kicking, or some similar violence, and manifests itself either as a swelling at the point of the hock,

which consists of an effusion of bloody serum and thickened skin; or the swelling bulges out on each side of the hock, making the enlargement more prominent at the sides. This is found to consist of an enlargement of the bursa or small bags, which contain the lubricating fluid for the part, and over which the sinews glide.

TREATMENT.—Give the Specific, B.B., for INJURIES, ten drops three times per day. Foment the part with hot water morning and night, applying the VET. CURE Oil after each fomentation, as for capped elbow. After the heat and irritation are reduced, careful hand-rubbing and the use of Specific, I.I., at night will do much to disperse the enlargement of the bursa.

Curb.

At the back of the hock, three or four inches below its point, an enlargement or swelling arises, which has received the name of *curb*. It is a strain of the ring-like ligament which binds the tendons in their place, or of the sheath itself. It comes on in consequence of a violent strain of the flexor tendons, or may occur in consequence of a blow, kick, or contusion upon the part. It is most likely to occur in cow-hocked horses, where the hocks are turned inward, and the legs form a considerable angle outward, as in such cases the angular ligament must be continually on the stretch in order to confine the tendon.

When it first occurs, the swelling may not be great, but is attended with warmth, pain, and lameness, the leg being moved with caution and awkwardly.

TREATMENT.—In recent cases, bathe the part with the MARVEL OF HEALING and water often, and give the horse rest, and administer the Specific, B.B.,

for SPRAINS, fifteen drops three times per day. The application of the VET. CURE OIL morning and night will be better, after the heat and swelling have mostly subsided. Give the horse rest, for in no case is rest more absolutely required for a permanent cure than in this. If prematurely put to hard labor it is very likely to return again. If the curb is permitted to run its course, the acute stage will pass off leaving a hard, cold tumor, which may or may not materially interfere with the motion of the joint. All old cases require the Specific, B.B., for SPRAIN, once or twice daily, and its continued use for some weeks.

Docking.

By docking the tail of a horse, his shape and external appearance are sometimes improved, yet the operation is not without its consequences, such as inflammation, nervous iritation, fistulous ulcers, tetanus, etc. It is to hoped that the time is not distant when this barbarous and senseless custom will be abolished, and the stern hand of the law laid upon every man who thus mutilates one of God's creatures. Yet if the senseless operation is to be done, after being done dress the wound with the VET. CURE OIL, which keep applied to the wound until healed. Give first fifteen drops of the Specific, A. A., for FEVER, and after a few hours, the same of the Specific, B.B., for INJURIES, which may be repeated from time to time to relieve the soreness and inflammation, and promote healing.

Fractures.

Fractures of the bones of the horse occasionally occur in consequence of some severe blow, contusion, fall, or other injury. They are discoverable from the *difference in shape*, the *swelling*, *lameness of the*

part, and especially by the "CREPITUS," or grating sound, which occurs from moving the two fractured ends of bone together. In all doubtful cases, this crepitation is the reliable criterion. In the more palpable cases, the distortion, loss of the use of the part, and extensive swelling, remove all doubt.

Among the most common are fractures of the ribs, forming a swelling over the place, which is very sensitive to pressure. Of the pelvis, rendering one hip lower than the other. Of the leg, rendering movement and use of the limb impossible, the point below the fracture swinging about useless.

Fractures are *simple* where a single break occurs in one bone, *compound* when the surrounding parts are lacerated, and *comminuted* when bones are broken up or fractured in different directions.

The treatment of all fractures rest upon very simple principles. Bring the broken parts to their natural position, and keep them there until they unite, and the more perfectly this is done, the more perfect will be the result. Unfortunately, from the weight of the animal, and often his intractability, this is not always easy or even possible. But, on the other hand, nature will eventually heal even the worst cases, requiring, it is true, a longer time, and leaving behind very sad traces of her faulty workmanship. So that in treating a fracture, all these elements should be taken into consideration.

Fracture of the ribs: Bathe the swelling with THE MARVEL, and the parts will soon unite. Bandaging is of no consequence.

Fracture of the haunch-bone cannot be reduced, but nature will ere long heal it, though with some distortion, one hip will be lower than the other.

Fractures of the leg, from the weight of the animal, are extremely difficult to manage. It can only be

done by suspending the animal by stout canvas passing under the belly and attached to rollers on either side, and by means of pulleys raising him up so that the feet just touch the ground, the canvas being supplied with heavy bands before and behind, to keep the body securely fixed in the canvas. The fractured ends of the limb should then be carefully adjusted, and the limb wound well with a roller-bandage, then a pair of iron splints, grooved so as to fit the limb, and well wadded with tow; the splint that is behind two or three inches longer than the foot, should be securely bound on. The whole internal bandage should be bathed in THE MARVEL, and kept wet with it, from time to time, for a week. This will subdue the inflammation and hasten the union of the parts. After eight days, the splints should be removed and the limb examined, and again replaced, to remain five or six weeks, at the end of which time the splint may be removed, and a simple bandage and lighter splint retained until the cure is perfected in some six weeks longer, when the animal may be trusted to use his limb. If the ends are in proper apposition, and maintained there, the union will be perfect, with but little swelling or deformity.

The general treatment of all fractures is to place the parts in apposition, keep them there by proper splints and bandage, and keep the place wet with the MARVEL until the heat and swelling have subsided. A dose of the Specific, B.B., for SPRAINS and INJURIES, ten drops will be appropriate morning and night to favor reunion.

Luxation of the Patella, or Stifle.

Under the influence of a severe blow, a sudden leap or strain, the patella, or knee-pan is sometimes displaced. The animal holds his leg stiff and extended, cannot rest on it, and when obliged to walk, draws it along. This displacement of the patella is called being STIFLED. The displacement can be reduced by the aid of sufficient help, and placing a side-line with a hopple on the pastern of the affected limb, and, drawing the hind leg forward, the surgeon will then, with both hands, bring the bone to its place.

Often the reduction is effected of itself if the horse makes the slightest effort. The part should be bathed in ARNICA or THE MARVEL, as the ligaments are always injured, and fifteen drops of the Specific, B.B., for INJURIES, should be given three times per day.

Injuries of the stifle, bruises, strains, etc., often occur, and should be treated by bathing the part with THE MARVEL or ARNICA, and giving the animal the above Specific for injuries.

Fractures of the Jaws and Skull.

THE JAWS.—The anterior maxillary bone, that containing the upper nippers, may become broken from a fall either on the road or against the manger, or from a kick. In these cases, the front upper teeth will be driven considerably inside the lower ones, when all that is necessary is to place the forefinger on the bars and the thumb over the gums, and by force bring the broken portion out to its original position. A broad strap fastened to the head-collar should then be placed over the nose, so as to prevent the horse from opening his mouth. He should be turned round in his stall, his head

fastened by the pillar chains, and be fed with thick gruel from a pipe for about three weeks. Cases have been treated in this manner with perfect success.

The lower jaw may also be broken from a kick, or by a severe bit and curb in a pulling horse, when crepitation and inability to feed, accompanied by swelling of the part, will point out the nature of the injury. The horse's head should be racked up as in the former case, and if swelling has not supervened, the bones set and retained in their proper position by a pitch plaster, over which a gutta-percha case, made to fit the jaw by first steeping it in hot water, should be applied. It should be further secured by a broad strap carried over the nose and fastened to the head-collar. In those cases, where there is much swelling, we have found it sufficient to keep the head racked up by the pillar-chains, and not to allow the animal any hard food for a month. He should be fed on gruel, or very sloppy mashes.

The Ridge of the Occipital Bone.—This bone is sometimes fractured from the horse's rearing and falling backwards. The best treatment is to make a free incision, and remove the detached portion, or Poll Evil will certainly ensue.

The Zygomatic and Supra-Orbital Arches.—These are liable to fracture from the animal's dashing his head against the ground when suffering from severe Colic, or from running away and striking his head against a wall. If the fracture is a simple one, we replace the bones in their natural position, and there retain them by stitching up the wound and then applying adhesive plaster. But should the bone be shattered, it is better to remove the broken pieces at once, and then treat the wound as an ordinary one.

Fractures of the Bones of the Body.

THE SPINE.—This, commonly called "broken back," is the most serious of all fractures, as Paralysis follows, and as this is incurable, the animal should be at once destroyed.

THE RIBS.—This is not very dangerous, except when a sharp end protrudes inward and injures the pleura or lungs; but when the fractured ribs are in apposition or protrude outward, a compress and broad bandage, with rest and great quietness, will soon effect a cure. Specific B.B.. will facilitate the cure. Should any constitutional symptoms arise, Specific A.A. must be given four times a day; and it had better be given in every case.

THE PELVIS.—The ileum, ischium, and pubes, which form the pelvis, are all liable to fracture from falls, and, with the exception of rest, little can be done in the way of treatment.

THE ANTERIOR SPINOUS PROCESS OF THE ILEUM.—When this is broken, the fracture can be easily detected by standing behind the horse and comparing the hips, when the injured one will be found depressed, or, according to sportsmen's phraseology, the horse is "down in the hip." When the shaft of the Ileum is broken, the depression on the quarter at the anterior part is very great, but with rest the bone becomes united, and many horses continue serviceable although the depression remains.

THE PUBES AND ISCHIUM.—The fracture of these bones, forming the obturator foramen, is generally accompanied by a narrowing of the pelvis from the over-lapping of the bones. Professor Dick recommends that the horse be slung, and the hand introduced into the rectum, then, by pulling the legs outward and forward, the parts may be brought

into their natural place; success can be ascertained by the hand in the rectum.

THE ACETABULUM.—This fracture may be known by an examination *per anum*, and when it occurs the case is hopeless.

THE SACRUM.—This injury produces paralysis of the tail, and is caused by the horse's falling backward on hard ground. The treatment consists in the application of splints with a crupper constantly attached for some days to a roller. Give Specific B.B.

Sprains and Dislocations.

Sprains of various joints or parts occur, which are more or less grave or serious, depending upon the extent of the injury or the joint involved. If a bone is displaced it is termed a dislocation. The joint becomes painful, swelling soon ensues, and on comparing the joint with its fellow, we perceive the distortion; the limb is longer or shorter, and the animal moves it with great difficulty or not at all. If the bone is not moved from its position, but the ligaments are merely injured, or torn, or joints otherwise bruised, it is termed a sprain. The swelling in this case is often as severe and even more so than in case of actual dislocation. Yet the accident is not so serious, because in cases of horses and cattle, a dislocation is not always curable, and if the joint be replaced, the danger of new dislocation is far more imminent than though it had never occurred.

CAUSES.—Sprains and dislocations occur from false steps, slipping, leaping across ditches, sudden springing, violent effort in drawing a load, or sudden turning, or from falls, blows, kicks, contusions, etc.

TREATMENT.—In all such cases the indications are simple, yet the execution of them is sometimes very

difficult. For sprains, bathe the parts with THE MARVEL, or ARNICA, to keep down the swelling and inflammation, renewing the application from time to time at intervals of two, four, or six hours, according to the urgency of the case, and give the Specific A.A. six doses three hours apart, then B.B. morning, noon and night.

Sprains of the Fetlock.

A sprain of this joint sometimes occurs, manifested by heat, swelling, and lameness more or less decided, and especially manifested when the horse is moving on uneven ground. When recent, bathe the part with THE MARVEL, and saturate a bandage with it, and wrap it up, moistening it from time to time, and giving the Specific, B.B., for SPRAINS two or three times per day, fifteen drops at a dose The pain and lameness will gradually abate

Cutting, Brushing, Speedy-Cut, Over-Reach, and Tread.

These are names given to bruises caused by one foot striking against another foot or leg.

CUTTING or BRUSHING is caused by a foot striking the opposite fet-lock or cannon bone. It may occur before or behind; usually behind. It arises from defective structure of the legs, or from wasting of the legs in horses badly fed, so that they are brought abnormally near to each other.

SPEEDY-CUT.—The inside of one or both feet usually strikes the fetlock joint of the opposite foot in passing it; but sometimes the cannon bone is struck just below the knee; the bruise thus caused is called "Speedy-cut." It occurs during fast action, generally in horses with badly shaped legs. It is more dangerous than common cutting, because the

pain is more severe and the shock to the system greater, so much so that sometimes the horse falls as if he were shot. Examination may discover a small bare place, partially concealed by adjacent hair, or a contusion, or an abrasion of the skin, or a scab on the inside of the cannon-bone. In bad cases the periosteum may be swollen and the bone itself enlarged.

TREATMENT.—This should be the same as for common cutting; but in all probability the only effectual remedy will be the construction of a speedy-cut boot, with a pad on the inside of the leg reaching from the knee to the fetlock, kept in position by buckles, and resting on the fetlock joint.

TREADS AND OVER-REACHES.—These are names given to a wound between hair and hoof, inflicted either on the fore coronary substance by the shoe of the hind foot, or on the hind leg by another horse treading on it. Cart horses may inflict the injury on themselves with the calk of the shoe. These wounds are sometimes difficult to heal in consequence of the difference in organization of the parts injured, the exterior being highly vascular, but the interior cartilaginous.

TREATMENT.—Any portion of detached horn or bruised skin should be removed with scissors, the wound cleansed and dressed with the VET. CURE OIL placed on soft tow and bound up with broad tape. On the third and every subsequent day the dressing may be removed, but fomentation and poultices must be avoided. In cases of neglect or ill-treatment the suppurative process may have become established, and the fomentation may be necessary. If further neglected the disease may end in Quittor.

In all cases of INJURIES or BRUISES, give Specifics

A.A. and B.B. in alternation, two doses of each per day.

Strains.

Strains of the tendons, or of different parts of animal, occur, which are more or less serious, according to circumstances, and which require medication for prompt and complete restoration.

A strain of the loins may occur from a leap off a bank, or from a slip, or from turning round in a stall. If severe, it is difficult to cure. The horse bends or lowers the quarters when walking, moves backward with difficulty, trots unsteadily, and thus refers his suffering to the loins. If very severe, he cannot move back or scarcely forward, drags his hind legs, and his quarters tremble when walking. In extreme cases he cannot raise himself, but sits on his haunches like a dog, soon falling again to the ground. There is heat, swelling and tenderness of the lumbar region.

The shoulder may be strained by galloping on a hill-side, or by a false slip in leaping, or by other effort causing a violent strain of the muscles of the shoulder. The suffering is quite severe, the animal is incapable of extending his shoulder, and therefore drags his toe on the ground in attempting to walk. The horse also goes down-hill with great difficulty. In some cases, there is considerable heat and swelling, and great pain when the shoulder is pinched. If the leg is lifted high up and drawn out forcibly forward, it causes great pain This mark distinguishes the strain of the shoulder from any disease or lameness of the foot, that *it causes great pain to extend the limb forward, and, in standing, the horse places the leg before him not stretched out straight, but bent and resting on the toe.* After this condition

of things has continued some time, a sinking in or depression is shown at the crest or top of the shoulder-blade, from inflammatory action and wasting of substance, to which the term SWENEY has been given.

Strain of the haunch, in which the animal halts a little, spares the affected limb as much as possible, and can neither trot or gallop. When the strain is but slight, the animal scarcely limps in walking, and seems only pained when urged at a faster gait; when it is severe, even standing is painful, the animal limps in walking, and drags his leg; and in trotting, his buttocks describe a sort of swinging movement. It is often very difficult to detect it, but its presence may be inferred when a careful examination can discover no injury or lesion in any other part of the limb, and especially if the horse will not permit his haunch to be examined. It differs from spavin in that the lameness increases rather than diminishes by walking.

Strain of the tendons of the leg or of the enveloping sheath, is generally attended with excessive lameness and inflammation of the part, and the point of suffering is readily discovered.

TREATMENT.—In all cases bathe the part with the MARVEL or with ARNICA when the MARVEL is not to be had, and so long as there is heat, soreness, and swelling, continue to apply the wash every two or four hours. I prefer the MARVEL in all cases, yet the Arnica does very well. The frequency of the application and length of time it should be continued, depends on the extent or severity of the injury. Give also three times in the day, fifteen drops of the Specific for INJURIES, B.B., according to the urgency of the symptoms. In old cases, a dose morning and night is sufficient; for more recent or fresh strains,

a dose four times per day, until the more urgent symptoms are relieved.

In cases of strain of the shoulder or of the tendons, it is important to take the strain off the injured limb, and for this purpose a high shoe is best. Rivet two horse-shoes together two or three inches apart, the lower one the smallest, so as not to interfere in nailing, and keep this on until the strain is cured. Such a shoe is often necessary in many similar cases, to relieve the suffering or injured limb, by keeping the weight of the animal mainly upon the sound feet.

Sprain of the Psoas Muscles.

This occurs from drawing heavy loads on soft ground, or from horses' hind legs slipping back on ice, or from jumping a bank.

SYMPTOMS.—Difficulty in bringing up the hind legs when made to move, and sometimes inability to stand. It may be mistaken for spinal injury, but the difference is as follows: When the spine is injured, complete paralysis takes place, whereas in Sprain of the Psoas Muscles the animal is able to kick and to extend the leg with great force. Examination *per rectum* will leave no doubt as to the nature of the injury, for pain on pressure, and tumefaction of the muscles, will be evident.

TREATMENT.—This is similar to that of the last named Sprain. SPECIFIC B.B., morning and night.

Sprain of the Muscles of the Haunch.

The gluteal muscles are sometimes sprained by violent exertion of any kind. The injury will be followed by effusion, swelling, and stiffness of the quarters, and afterwards by a gradual wasting of

the muscles, which can be perceived by standing behind the animal and comparing the quarters.

TREATMENT.—Warm fomentations, Specific A.A., and, after the inflammation has somewhat subsided, the Specific B.B. four times per day.

Hip Joint Lameness.

This lameness may be produced by a sprain of the round ligaments, or gluteus externus muscle; but it more frequently arises from a sprain of the tendon of the gluteus maximus at its insertion into the trochanter major.

SYMPTOMS.—A dragging and rotary motion of the leg, pain on pressure, and a swelling which fills up the natural furrow, so well defined in well bred horses, formed by the semi-membranosus and gluteus externus.

TREATMENT.—This is the same as for Sprain of the Muscles of the Haunch; but very good results have followed from the use of setons.

Sprain of the Stifle Joint.

This is not very common, but when it does occur it may be easily recognized by the swelling, which, being superficial, can be easily felt, and by the pain caused by pressure. The action is also peculiar; the animal is unwilling to advance the hind leg, and drags it after him in trotting.

TREATMENT.—Warm fomentations frequently applied, and MARVEL OF HEALING morning and evening. As soon as the inflammation subsides the fomentation must be discontinued, and the Specific B.B. given, a dose three times per day.

Sprain of the Hock.

The tendons and ligaments of this joint are all liable to be sprained in leaping and galloping through heavy ground. The tendons of the gastrocnemii internus, or those which retain the latter in its place, sometimes become lacerated, and allow the cap formed by the gastrocnemii tendon to slip off the os calcis to the outside. In such an accident we cannot replace the tendon, but with rest and fomentations the animal may become fit for road-work.

The tendon of the flexor pedis perforans, which passes down the back of the hock, is occasionally sprained, and the sprain is followed by a thickening, and sometimes ossification of the tendon. The extensor pedis at the front of the hock may also be sprained, and this occurs just where the tendon passes under the inferior annular ligaments, and, being accompanied by distension of the bursa, may be mistaken for sprain.

The ligaments connecting the bones of the hock may suffer from an ordinary sprain, which, if discovered and properly treated, may be easily cured. But, unfortunately, the sprain is seldom discovered until the inflammation has wrought an important pathological change in the tarsal ligaments, whereby their structure loses its elasticity and becomes converted into a cartilaginous or osseous substance. If this takes place in the inner inferior part of the hock, we call the disease Spavin; but if on the posterior inferior part we call it Curb. These are usually classed as diseases of the bone, but they more properly belong to this category, as they are an effect of long continued and neglected Sprain.

Give Specific B.B., a dose of fifteen drops, three times per day.

False Quarter.

CAUSES.—Either from injury which the coronary substance has sustained in Quittor, or from the horse treading on the inside quarter, or from the tread of another horse on the outside, or from external violence. A solution of contiguity takes place underneath in the horny fibres of the hoof similar to sand crack. The consequence is that there is no strength in the affected heel, and lameness is occasioned.

SYMPTOMS.—A deficient growth of horn in the lateral part of the hoof, or a fissure usually with a horny bottom, but in some cases the exposure of the sensible lamina, in which inflammation is set up. In this case there is oozing of blood or matter, attended by considerable lameness.

Broken Knee.

This is a very vague term, and may imply simply a bruise, an abrasion of the skin, or a division of the tendons, or of the capsule of the joints.

CAUSES.—Mechanical, such as falling, or striking the knee against some hard and sharp substance.

SYMPTOMS.—There may be a simple bruise, without perforation of the skin, which, though not strictly speaking a broken knee, may be conveniently regarded as such; the knee is hot, swollen, and painful, and sometimes hair is removed. Or there may be abrasion of the skin, or it may be cut through, torn and jagged, and the underlying tissues more or less injured, the sheath of the tendon being exposed. If no glairy fluid issue at the time, the joint is not open, and there is no cause for uneasiness about anything except the blemish which may remain, but which will generally be very slight if suitable treatment be adopted. A more serious form of Broken Knee is where it is bruised, cut, or lacerated, and

opened down to the joint, accompanied by the escape of clear synovial fluid, "joint oil," like the white of an egg.

TREATMENT.—The horse's head must be racked up for a few days, or placed in cradles, to prevent his biting the wound. In borken knees where the skin and sub-textures are very much contused, and where such a quantity of sand has become imbedded that suppuration is a necessary consequence, after fomentation, it is well to put on a turnip or carrot poultice (but never bran, for it acts as an irritant). A leg of a woolen stocking should be drawn up over the knee and fastened round the leg at the lower part with a piece of tape, then, from above, the space in front of the knee can be filled with mashed turnip; the upper part of the stocking can then be fastened as the lower. The poultice may be repeated morning and evening for about three days, when suppuration will most probably be established, and no further treatment be necessary unless the granulations become too luxuriant, when VET. CURE OIL may be applied, but not too freely or too often. In a few days the scab will fall off, and if cicatrisation has not taken place, the process may be hastened by washing the part three times a day with tepid water or better with MARVEL OF HEALING. Give Specific B.B.

Stings of Bees, Hornets, &c.

Sometimes where a horse has been tied near a swarm of bees, if sweaty or otherwise offensive to them, the swarm has been known to attack and settle on him, producing pain, inflammation and swelling, not unfrequently resulting in death. The stings of hornets are as bad or worse. The MARVEL applied freely will relieve at once. Give at the same time the FEVER SPECIFIC A.A., internally, fifteen drops, and repeat it every hour. If you have not the MARVEL, use ARNICA in the same manner.

CHAPTER III.

DISEASES OF THE FEET AND LEGS.

Lameness.

The adage "No roof, no house," is matched by "No foot, no horse," because in either case the value of the thing is measured by the part that is wanting. So lameness or its absence is the essential part to be looked after in a horse. Fortunately it is not always necessary to decide in our Specific practice the precise point, structure, tendon or muscle involved in order to cure, but it is always desirable. Hence the following points are suggested.

If the lameness has come on *suddenly* during a drive or work, it suggests some accident, or other very recent cause, such as *picking up a nail* or a *stone*, a *bruise of the sole*, an *over-reach*, or a *strain* of a *tendon or joint*. If it has come on *slowly* or *gradually*, it would suggest some more deep-seated or constitutional cause.

If it occurs of having been out, or worked in cold rains, or after work standing uncovered in a cold chill wind, it suggests *rheumatism* or rheumatic lameness, or *laminitis* "founder of the feet."

An examination must always be made quietly. If the horse is excited you are liable to be put upon the wrong track. If the *fore feet* are affected the hind feet will be likely to be brought far forward in order to take the weight off the sore place. If one fore foot *points* or is advanced some inches beyond the other, it suggests some difficulty in the heel of that foot or back part of that limb; while, bending the knee and fetlock, and resting the foot or the toe without

advancing it, suggests a disease of the shoulder or elbow. In all cases of lameness of *one foot*, that one will rest more lightly on the ground, and be raised more quickly than the other. In exercise when one limb is affected, that foot comes to the ground less heavily than the other, and the head and fore part of the body are elevated, when it comes down and drops again when the sound foot comes down. With lameness *in both* fore feet the *step is short*, and the stroke on the ground weak, the shoulders stiff, head raised, and hind feet brought unnaturally forward. In lameness on *one side behind* the rising and falling of the hip on the affected side is more marked than on the sound side. When *both sides* behind are involved, the fore feet will be kept well back under the animal to relieve the weight. With these hints in mind the location of the trouble may be usually ascertained and the treatment by external applications facilitated. Consult also the special form of lameness or disease which the examination has indicated as the directions or hints given therein may be valuable as *strain*, *sprain*, *rheumatism*, *bruises*, *corns*, *stifle*, *founder*, *spavin*, *splint*, *etc.*

TREATMENT.—In general, when the point of difficulty is known, and if recent, the place swollen, or heated to the feet, apply the MARVEL OF HEALING, diluted one-half with water, two or three, or more times per day. In severe cases, put on a compress wet with the diluted MARVEL, which renew as often as it gets dry, and give Specific A.A., if there is much heat or fever in the part, a dose say four times per day. When the heat has subsided, or if there is no special fever or heat apparent, give Specific B.B. as often at first, and later or in more indolent or chronic cases a dose morning and night. Later, and espe-

cially if the lameness is worse on first morning, give Specific I.I. in place of Specific B.B., or alternate the one morning and the other night.

The VETERINARY CURE OIL, may be used after the use of the MARVEL, or when there is local swelling, bruise, or any *chafing*, *cut*, *scratch* or *ulceration* or for *bruised* or *broken hoof* or *corn*. Apply it daily.

Laminitis, Inflammation of the Feet, or Founder.

This is one of the most frequent diseases of the horse, and one in which the resources of my HOMEOPATHIC SPECIFICS are very efficient. The sensible lamina or fleshy plates on the front and sides of the coffin-bone, are, like all other vascular structures, very liable to inflammation, particularly from violence or long continued action of the part. Hence, standing long in one position, as in sea voyages; battering or bruising the feet in severe or long journeys; sudden changes from heat to cold, or from cold to heat, acting directly on the feet; standing in snow or cold water after a journey, are among the more common causes of this disease. It sometimes occurs as a mere transition of the disease from some other part, and occasionally from *excess of food or indigestible food*, or *food when heated.* Many cases of so-called FOUNDER are really only attacks of *Acute Rheumatism;* hence consult what is said on that disease, and compare the two chapters for a better understanding of the subject.

SYMPTOMS.—The disease generally begins with a shivering, shaking chill; the flanks heave; the breathing becomes quick and labored; the pulse full and frequent; the horse shifts his feet from one place to another, lies down and rises frequently, but

does not paw the ground nor kick his belly; he will sometimes place his lips on the fevered feet, as if to tell where his pain is; he places his hind legs under him, as if to take the weight of his body from the fore-feet; he moans or groans from the severity of the pain, and at last lies down, unable to stand upon the inflamed feet. The feet are intensely hot and painful. If one foot is taken up, he can scarcely stand upon the other, and may tumble down. He does not like to get up from the ground, and is moved with difficulty from one place to another. If the disease be not arrested, matter may form inside the hoof, which even may be thrown off.

The disease may exist in a more chronic form, coming on by degrees, and eventually resulting in the ruin of the horse.

It is more common to see it in a milder form than the first-mentioned, presenting the following symptoms: The horse is feverish, out of spirits, refuses to eat, cannot raise his limbs without evincing pain, trails his feet along with difficulty; cannot readily be made to go forward, or backward scarcely at all. In the stable, horses bring the four feet near together, and there is no little difficulty in making them relinquish this attitude.

TREATMENT.—In the more severe cases, the shoes should be removed from the feet, and the hoof pared down until the horn yields to the pressure of the thumb. Give the horse rest, and allow him to lie down, wrap the hoofs in cloths soaked in water, and renew them from time to time. If the disease is from the feet having been battered by long driving or riding, bathing them with the MARVEL or ARNICA will be of great value. In some cases, a cold poultice, made of mashed turnips or carrots, is of excellent service.

The remedy is SPECIFIC B.B., of which a dose may be given every three hours, in acute cases. In recent cases, when there is *fever*, *decided lameness* and *heat of the foot*, and indeed in almost every case, you may better begin with SPECIFIC, A.A., of which give a dose every two hours, and after three or four doses alternate with SPECIFIC, B.B., as often as every two hours, and after the force of the disease has abated, the SPECIFIC, B.B., may be continued alone at increasing intervals, until entire restoration.

When the disease is clearly traceable to *over-feeding*, the SPECIFIC for FOUNDER, B.B., and that for INDIGESTION, J.K., may be alternated from the first, every three or four hours, in doses of fifteen drops.

In case of chronic Founder, the SPECIFIC for FOUNDER, B.B., should be given, a dose of fifteen drops each morning and night, and the treatment continued for some time. An occasional dose of the SPECIFIC for INDIGESTION, J.K., will be useful as a constitutional intercurrent remedy, and may be given at noon, while the SPECIFIC B.B. is given morning and night.

On the Formation of Joints.

Joints are formed of bones which fit into each other by unequal surfaces, whose cavities and eminences mutually correspond. As the roughness of the bones would prevent their moving freely without friction, we find an intervening smooth elastic substance called cartilage, which not only obviates this inconvenience, but in a great measure takes off the jar that would otherwise ensue when the horse moves on hard ground. To render the motion still easier, we find the cartilage covered with a fine synovial membrane, secreting a fluid of an albuminous and oily character, which acts in the same

capacity as oil to machinery, namely, to prevent friction.

Besides the membranous connection of bones which enter into the formation of joints, there are strong, flexible substances of a fibrous texture called ligaments, which are the chief bond of attachment, and support the lower joints; while others are further strengthened by muscles and tendons. Bursæ mucosæ are small closed sacs which are interposed between the surfaces of the joints where they move upon each other; they are analogous in structure to the synovial membrane, and secrete a similar fluid.

Synovitis.

DEFINITION.—Idiopathic or constitutional inflammation of the synovial membranes. The inflamed membranes never extend beyond a certain size, nor do they burst, nor do they terminate healthily without treatment, but remain in the same condition from year to year. The inflamed condition is most frequently observed at the hock, when it is called Bog-spavin and Thorough-pin. But it is also found affecting the knee and fetlock, and in the latter case is sometimes confounded with Windgalls, which are inflamed bursæ mucosæ.

CAUSES.—Rheumatic Fever; exposure to heat and cold; also friction from quick work on a hard road; sprains.

SYMPTOMS.—Lameness quickly succeeded by swelling of some joints, not of the surrounding fibrous texture, as in true Rheumatism; the swelling in this disease is in the synovial cavity, and the effusion is at first generally serous and unattended by the sthenic fever which ushers in the muscular or fibrous Rheumatism. As the inflammation proceeds,

coagulable lymph may be thrown out and the joint be permanently enlarged, or, from adhesions, the horse be left with a stiff or anchylosed joint.

Give Specific A.A., four times per day at first, then B.B., morning and night.

Ulceration of Articular Cartilage.

The inflammation in the synovial membrane sometimes extends to the cartilage, covering the ends of the tibia or astragalus. In such cases there is a diminution of the synovial secretion, also ulceration and wearing away of the cartilage, and a polishing of the surface of the bone, which has been erroneously called a porcelaineous deposit. We have seen this Ulceration of the Cartilage, and even caries of the bone, in the navicular more commonly than in the bones of the hock; but not a few cases of occult lameness in the hock may be attributed to it. Give Specific, B.B., two or three times per day.

Windgalls—Puffs.

In the region of the joints, and wherever friction is likely to take place, we find the tendons supplied with little sacs (*bursæ mucosæ*) composed of membrane similar to the synovial, and secreting in health an oily fluid from their internal surface, in very small quantities; but when the tendons become strained, or increased action is set up in them from over-exertion, nature comes to the rescue by increasing the bursal secretion, and we then perceive a slight elastic tumor, called *Windgall* or *Puff*.

Causes.—Tendinous sprains or over-exertion of any kind, and long continued friction from quick work on hard roads. Low, marshy pastures seem to have a tendency sometimes to produce a dropsical

effusion in and around the joints of young horses very similar to the enlarged bursæ from hard work; but they soon yield to constitutional treatment.

SYMPTOMS.—Soft, elastic, circumscribed swellings, at first about the size of a nut, but eventually becoming hard and much larger, which appear in the neighborhood of some of the joints, such as the knee, hock, or fetlock. To the latter, however, the name is usually restricted, although equally applicable to the former; so that when we say that a horse has Windgalls, we mean that he has above, or on each side of, the fetlock, or back sinew, one or more elastic tumors, usually unattended by lameness or any active inflammation. The seat of these bursal enlargements is either between the perforatus and perforans tendons, or between the latter and the suspensory ligament. There is, however, another fetlock Windgall found on the front of the joints, between it and the extensor tendon; and a similar swelling occurs at the supero-posterior part of the knee from the distension of the bursa, between the perforatus and perforans tendons.

PATHOLOGY.—These enlargements were formerly supposed to contain wind, and so obtained their absurd name; but, from what has been already stated, the reader will perceive that they consist in an increase of bursal fluid similar to joint oil, and in a majority of cases do no harm, but are rather to be considered as a beautiful provision of Nature to obviate the baneful effects of friction from over-exertion of the muscles and tendons. Morbid changes, however, do occasionally take place in the bursæ, either from inordinate increase of their contents setting up inflammation in their tissue, or from an extension of the inflammation to contiguous parts, in which not only the bursal sacs, but also

the lining membrane of the tendinous sheath, participate, when we find the puffy swelling extending up the leg, above the ordinary seat of Windgall, and very tender on pressure. The effect of this inflammation on the bursæ mucosæ is to cause a thickening of the membrane and a total change in the contents of the sac; the fluid, instead of being a straw-color, becomes reddened from the effusion of blood, which, after death, we find clotted and of a dark color. Lymph also is occasionally effused, giving the tumor a firm, hard feel, which, from calcareous deposits, produces lameness.

Specific I.I., given morning and night, often clears up these blemishes wonderfully.

Seedy Toe.

This disorder, frequently a sequel to laminitis, often arises without any assignable cause. It can sometimes be attributed to the clip of the shoe pressing on a hoof predisposed to the disease from deficiency in its natural glutinous secretions, whereby the horn becomes dry and loses its cohesive property, and is unable to resist the pressure from the toe clip, which a healthy hoof would do with impunity. It may also be consequent on gravel or dirt working in at the edge of the sole.

Symptoms.—The horn at the toe (of the fore-feet of troop and riding horses, but frequently the hind feet of cart horses) becomes "seedy," and crumbles away like so much saw-dust or the dry rot in wood; while at the junction between the wall and sole a fissure will be apparent, leading upward between the outer and inner crusts of the wall, sometimes extending up to the coronet, and in old cases laterally, so that there is some difficulty in finding a piece of horn sufficiently sound to hold a nail, and

side clips become necessary in keeping the shoe on. Percussion on the wall of the hoof with a hammer will show to what extent the separation has taken place.

TREATMENT.—The whole of the crust, as far as it is separated from the horny laminæ underneath, must be cut away, and the foot bound up with tar, tow, and broad tape. VET. CURE OIL applied to the coronet will hasten the downward growth of the wall. Keep the horse standing in clay, daily anointing the hoof with the VET. CURE OIL. Both means have been successfully tried. Give Specific J.K. morning and night.

Navicular Joint Disease.

This disease is far more frequent than is usually supposed, and many horses are ruined by it, the lameness being generally referred to the shoulder or to some other part not at all in fault.

Behind and beneath the lower pastern-bone in the heel of the horse, and behind and above the heel of the coffin-bone, is a small bone called the navicular, or shuttlebone. It is so placed as to strengthen the union between the lower pastern and coffin-bone, and to enable the flexor tendon which passes over it to be inserted into the bottom of the coffin-bone, to act with more advantage. It thus forms a kind of joint with that tendon. There is a great deal of weight thrown on this bone and from this navicular bone on the tendon, and there is considerable motion or play between them in the bending and extension of the pasterns.

It is easy to conceive that from sudden concussion or from rapid and over-strained motion, and at

a time when, from rest and relaxation, the parts have not adapted themselves to the violent motion required, there may be excessive play between the bone and tendon, and the delicate membrane which covers the bone or the cartilage of the bone, may become bruised, inflamed and injured, or destroyed, and that all the painful effects of an inflamed and open joint may result, and the horse be incurably lame. Numerous dissections have shown that this joint thus formed by the tendon and bone, has been the frequent and almost invariable seat of these obscure lamenesses. The membrane covering the cartilage becomes inflamed and ulcerated; the cartilage itself is ulcerated and eaten away, the bone has become carious, and bony adhesions have taken place between the navicular and pastern and coffin-bones, and this part of the foot has become completeiy disorganized and useless.

SYMPTOMS.—The degree of lameness is various; the horse may show lameness the first hundred steps, or the first mile or two, and then less or scarcely at all; he is inclined to "point" or keep the affected foot in advance of the other when standing: he may show lameness on stone or pavement and not on turf or ground; if both feet are badly affected, the horse favors his heels, has short action, and wears away the toes of his shoes, leaving the heels undiminished in thickness; the hind feet may be kept well under him to diminish the pressure upon the fore-feet; in the stable, he is mostly lying down: heat of the foot and heel, especially the heel.

TREATMENT.—In the earlier stages when there exists only irritation and inflammation, and no changes of structure or disorganizations have yet occurred, the SPECIFIC for STRAINS OR INJURIES, B.B., together with cold fomentations kept to the foot,

will be found sufficient. Give a dose of fifteen drops four times per day.

In more extreme or advanced cases, the sole should be pared down and the quarters rasped, and shoe worn without nails on the inner quarter, to unbind as far as possible the imprisoned bone, and the foot kept anointed with the VET. CURE OIL, keeping up the use of SPECIFIC, B.B., as above indicated. These will be successful in the incipient or milder stages of the disease and will vastly benefit old or chronic cases.

Sand Crack, Quarter Crack.

That is a separation of the fibres of the hoof from above downward—rarely crosswise. The usual treatment is to drill two holes through *each side of the crack* and then pass copper or iron wire through them. Both ends of the wire are then drawn and clinched down and fastened in the same way as the nails in shoeing. The crack itself is then to be filled with cobbler's wax after having been thoroughly cleaned out. Give also, morning and night, ten drops of the SPECIFIC, J.K., to promote the growth of the hoof.

A yet better method is to properly prepare a *horse shoe nail* by cutting *bards along in it, from head to point.* Then drive the nail from one side of the crack through to and beyond the other at least half an inch from the crack. The clinching of the point of the nail will drive the bards back and firmly fasten them, and the head and point may be filed down and smoothed off. A long crack should have two nails. The shoe should be so fitted and the hoof so pared away, as to *take the bearing off from the cracked portion*, and as the hoof again grows down, it should be again *cut away between* the *hoof*

and shoe with a saw, so as to keep the bearing of the cracked part of the hoof free. You thus rivet the broken parts together, and by taking off the strain allow the crack to grow out, and heal up. Of course a horse with a quarter crack should only be put to the most moderate work, if any, as violent exercise or hard work will be sure to aggravate and increase the difficulty, and may render a cure impossible.

Quarter crack only occurs when some brittleness or defective horny growth is present. Correct this defect by giving the SPECIFIC J.K., fifteen drops morning and night, and apply the VET. CURE OIL to the crack as often.

Corns.

A corn is a bruise upon the sole of the foot at the angle between the wall and the bar, and has this resemblance to the corn in the human subject, that it is produced by pressure and results in lameness. It may be caused by contracted feet; cutting away the bars; too thick-heeled shoes or weak, flat feet; dirt getting between the shoe and heel of the foot; or from not having the foot sufficiently pared out.

SYMPTOMS.—The pressure arising from these causes produces an irritation, congestion, soreness, and even extravasation of blood under the horn, with often a reddish appearance and a softer feel than other parts of the sole. The place is painful when pressed upon, the horse flinches and is more or less lame. In bad cases matter may form, and unless a vent is made, may underrun the sole or appear at the coronet in the form of a quittor.

TREATMENT.—In most cases, simply apply the VET. CURE OIL to the sore place night and morning after having properly cleansed the foot. See that the

shoe does not press upon the sore place, but has its bearing upon the outer crust of the hoof. If matter has formed under the corn, the dead horn may be removed and a vent made and a poultice applied to soften and discharge the matter, after which apply the *Oil* until the soreness is removed. Give mornings, SPECIFIC I.I.; at night, SPECIFIC J.K. and keep the OIL applied to the surface. Change the poultice and dressing each night and morning. In a few days the foot will be ready to shoe in the usual way, using, however, a leather sole to keep out the dirt. Give also, each morning and night, a dose, ten drops, of the SPECIFIC for ULCERS, I.I. If a quittor has formed, it should be treated as such.

Prick in the Foot.

Sharp substances, such as nails, glass, pointed stones, or similar substances, not unfrequently penetrate the foot in traveling, or the shoe may be partly torn off, and the loosened nail be thrust into the foot, or a nail may go wrong in shoeing.

When a sharp pointed object is picked up on the road, it may enter the toe of the frog and wound the navicular joint, or the flexor, at its insertion into the pedal bone, and let out the "joint oil," in which case there is danger of permanent injury. The wound may lie further back, and be in the bulbous heels or cushion of the frog; in this case there is less danger.

In shoeing, the nail may be driven too near the laminæ, or even wound them; in the latter case the horse *will flinch;* in the former he may not feel the nail till he *puts his foot to the ground.* If on the day after shoeing he walks lame, the foot is hot to the touch, the horse flinches when the crust is tapped

with a hammer, especially where there is a nail, it may be assumed that the shoeing is at fault.

SYMPTOMS.—Lameness, with heat in the foot and tenderness on pressure. In some cases, no matter will be found, but in others a black serous or purulent discharge will issue from the wound when opened, and the sole will probably be underrun.

TREATMENT.—If there is simply *heat of the foot* and *lameness*, remove the shoe, see that all nails or parts of nails, or other foreign substance is taken out. Apply and keep the foot wet with the MARVEL OF HEALING, and give the Specific, A.A., once in three hours, to reduce the inflammation. If matter has formed, LET IT OUT. Apply the VET. CURE OIL to the hole or orifice, and give Specific, A.A., and B.B., in alternation, a dose four times per day, and later the B.B., and I.I., to dry up the discharge. If the horse is required for work before the horn has covered the wound, a leather sole and the VET. CURE OIL dressing must be used.

Quittor.

This is a deep, narrow ulcer, opening upon the coronet, and leading into an abscess in the foot. It may be caused by treads, or overreaches, or corns, but most commonly from prick of a nail or other sharp substance. It is attended with more or less lameness; heat and pain in the foot, and discharge of matter from the open wound. But if it has been caused by the matter from a corn, the coronet above the heel will have upon it a hard, painful swelling, which afterward becomes softer and larger.

TREATMENT.—If the quittor arises from a wound of the sole or prick, after the wounded part has been pared out and poulticed as directed in the article for prick in the foot, then with a probe gently find out the direction and number of pipes, and with a fine

syringe, inject THE MARVEL of full strength into the opening, two or three times per day. Change the poultice night and morning until no more matter flows, and the quittor begins to heal. The VET. CURE OIL is better if you can get it into the opening.

When it arises from a corn in the heel, and matter has got into the coronet, the swelling must be cut into and the discharge let out; then poultice night and morning, inject the MARVEL as before, rasp down the wall of the hoof until it yields to the pressure of the thumb, and put on a bar-shoe. Roll a bandage around the coronet to keep the dirt out from the quittor.

If there is some considerable heat and fever, the FEVER SPECIFIC, A.A., may come in play, giving fifteen drops four times per day. But the SPECIFIC for ULCERS, I.I., should be given, fifteen drops three times per day, at first, and then morning and night until the quittor is healed.

Spavin.

This is an affection of the tendons, ligaments, and bursa connected with the hock. From a strain, violent exercise, or similar cause, an increased action is set up in these parts which glide upon each other, irritation results and the parts enlarge. Or, an exudation of serum occurs, tinged or not with blood, which may be absorbed afterward or remain for a long time a soft movable tumor; or by degrees an ossific or bony deposit takes place, resulting in a firm, hard, bony tumor. These several stages or degrees of the same common affection have been termed *Bog-Spavin*, *Blood-Spavin*, and *Bone-Spavin*. Windgalls and Thorough Pins are but local variations of the same essential condition—enlargements of the bursa and tendons of the joint.

Spavin is essentially an inflammation of the ligamentous connections of the small metatarsal, with the internal cuneiform bone of the hock, yet the position of the swelling and ossific deposit may vary considerably. It usually shows itself on the inner and lower side of the hock at the lower portion of the joint. A careful comparison of the two legs with the eye and hand will best disclose the evil. "Sometimes it appears as a soft swelling of the femoral vein along the inner surface of the hock. Or, again, as a hot, painful, laming swelling, extending from the posterior border of the hock downward, which may afterward become a hard, bony tumor, insensible, causing the animal to limp only when making some exertion. Or, the swelling extends along the inner surface of the hock, oblong, a little broader above than below, bony, sometimes involving the entire joint, and occasioning more or less limping. Or a soft round swelling over the whole internal surface of the hock, at first not impeding the horse's gait, but afterward becoming indurated and causing a rigidity of the hock and consequent lameness. Or a hard osseous swelling at the upper and inner side of the femur, causing a lameness depending upon the extent to which the ligaments of the joints are involved. Or the muscles of the hind-quarters are not visibly affected, the horse does not limp, but simply raises one or both the hind limbs (for one is seldom affected alone) unnaturally high, with a spring, and puts them down again with a spasmodic twitching movement." (String halt.)

At first the animal seems afraid to use one or the other of the hind legs, and a little lameness is noticed on first starting off. Afterward, when returning to the stable after exertion, the horse stands on the toe of the affected limb, and limps considerably on

turning around and first commencing to walk; after moving a little, the lameness disappears, and only returns again after he has been standing some time. This will soon be followed by swelling.

CAUSES.—There is a predisposition to this affection in some families of horses, and when this predisposition exists, strains, violent exertion, overwork, a blow or other injury, readily develops the spavin. Horses with high legs, from three to seven years of age, are most liable to it.

TREATMENT.—In the earlier stages, while the lameness is yet recent, and little or no swelling has appeared, bathing the joint with THE MARVEL or ARNICA, and giving the SPAVIN SPECIFIC, B.B., night and morning, doses of fifteen drops will be sufficient to remove the lameness and generally prevent the swelling. When the swelling is still soft and recent, bathing the joint with THE MARVEL or ARNICA, and giving the SPAVIN SPECIFIC, B.B., night and morning, will reduce the swelling and relieve the lameness.

In all other cases of spavin, whatever may be its particular form or situation, give fifteen drops of the SPECIFIC for SPAVIN, B.B., each morning and night, see that the legs are well rubbed, with but moderate daily work or exercise. The pain, lameness, and subsequent exudation of bony matter depend upon the affection of the ligaments of the joint. This being relieved, the whole affection disappears. All recent and soft spavins may be successfully treated thus, and even the most inveterate ones will be relieved and benefited. It is not pretended or presumed that old chronic, years' standing spavins, when there are extensive ossific dispositions or necrosis, are to be caused to disappear by this or any medicine. But all those incipient cases may be thus cured and even the old enlargements vastly improved.

Bone Spavin.

DEFINITION.—This disease may be defined as a bony deposit on the inner and lower parts of the hock joint. This is the only kind of Spavin to which reference is now made, but there is another species of hock lameness to which some authors give the same name, consisting of ulceration of the cartilage and porcelaneous deposit, proceeding from concussion, and having no reference either to the cause or nature of true spavin, which is here described.

CAUSES.—These may be regarded as predisposing and exciting.

Predisposing.—This consists in congenital malformation of the joint, and is called hereditary. It has been said that horses are foaled with Spavin; many young horses have been indeed observed with the head of the internal metatarsal bone larger than usual, which appears like Spavin, and they have been rejected on account of their supposed unsoundness; but on further acquaintance, not one of them afterwards went lame or was cast for Spavin. The straight hock with small bones is the one most disposed to Spavin, especially if the os calcis be long, projecting outward and backward, thereby increasing the leverage of the muscles: but any hock is liable to it.

Exciting.—Suddenly throwing a horse on his haunches, either in harness or riding, galloping in heavy ground; jumping, especially in a deep or bank country; slipping on ice or wood pavement, or long continued draught. Placing a cork or calkin on the outside heel of the hind shoe without a corresponding elevation on the inside must increase the strain on the ligamentous fibres which connect the inner metatarsal bone with the small cuneiform,

and on the ligamentous union between the cuneiform or cushion bones. These ligaments, from sudden or long continued strain, at first become thickened, and then converted into bone, thus producing anchylosis of the articulations as well as exostosis. The late Professor Dick, not denying that Sprain is sometimes the origin of Spavin, attributed it in other cases to disease in the cuneiform bones. He says: "Nature is ever striving to make provision in the animal economy to enable the various organs to perform their functions, and, in order that the cuneiform bones may be able to resist the great pressure that is thrown upon them in progression, she hurries on the ossific process in them much quicker than in other bones. It is a well ascertained fact that organs during their growth are laboring under a degree of excitement, so that if the growth of the cuneiform bones be going on quicker, there must of necessity be a higher degree of excitement in them, which will, as a matter of course, render them more susceptible of contracting disease. Now, if the young horse be exposed to rapid exertion and heavy drawing (for it rarely occurs in aged horses) before the completion of that ossific deposit, it is not to be wondered at that inflammation is set up in them, and in proportion to the degree and extent of that inflammation will depend the size of the ossific deposition." "However," he adds, "compression is not the sole cause of Spavin, as it may arise from sprain of the connecting ligaments of the bones of the hock.' The fibro-cartilaginous tissue uniting the small to the large metatarsal bone frequently becomes strained, when inflammation and osseous deposition is the result. It is similar to Splint in the foreleg, and is called by dealers "Jack Sprain." It seldom

lames a horse, and cannot be considered as genuine Sprain.

Symptoms.—In the early stage we may not be able detect any enlargement, so that our diagnosis is ather negative than positive. We examine the remainder of the limb, and not being able to find any other cause, are very much guided by the history of the case and the fact that the horse does not bend his hock, and evinces pain on pressure. In turning him over in the stable we also perceive that he hops on the toe of the affected limb and does not put the heel to the ground. As the disease advances, we can perceive the enlargement by placing our finger on the vein just below the seat of the disease, arrest the flow of the blood, and thus more closely expose the latter to view. We may also, by comparing both hocks, either by running our hand over them or standing in front and looking between the fore legs, detect a small bony tumor on the inner and antero-inferior part of the joint.

Should any doubt yet remain on the mind of the examiner, he should place himself on a line with, and about two feet from, the shoulder of the horse, first on one and then on the other side, and by casting his eye over the inner superficies of both joints alternately, he will readily detect any difference which may exist between them. The action of a spavined horse, independently of his going on his toe, is peculiar. As soon as the toe comes to the ground, he catches it up again with a kind of spasmodic effort or quick catch, like Stringhalt; he also drags the limb, as if from want of motive power as well as from pain in the joint If, however, the animal be allowed to rest for a time and then trotted out, the lameness again becomes perceptible; but this gradually decreases with work. Other

indications are, pain on pressure and increased temperature on the inside of the hock. In cases of anchylosis of the tarsal bones, the horse seldom lies down and loses condition. After the first or incipient stage of Spavin is passed, and to that are superadded inflammation in the ligaments, cartilaginous or osseous depositions, and probably disease in the interior of the articulation, the lameness is worse when the horse is first brought out of the stable, but decreases with motion; this should be borne in mind when examining a horse with suspicious-looking hocks.

TREATMENT.—In former editions of this work following the best Veterinary authorities, I have recommended caustic applications with the view of removing this recent or hardened deposit. But a more extended observation and reflection has convinced me not only of the cruelty, but the inutility of such caustic applications. They only in part remove the evidence of diseased action, while they do not cure the morbid condition, the lameness and weakness, of the part. This, the real disease, will be kindly, naturally, and permanently removed by the use of Specific, B.B., while also the enlargement or deposit will be gradually absorbed and taken up, thus making a natural and perfect cure, so far as the nature of the case is susceptable of it.

Give a dose, fifteen drops, of Specific, B.B., morning and night, in all cases. It often cures alone. Even quite hard ossific enlargements have been seen to gradually disappear under the continued influence of this matchless Specific, B.B., with also every trace of lameness, a result which can only be looked for under the benign influence of HUMPHREYS' VETERINARY SPECIFIC, B.B.

Splint.

In consequence of an injury a bony tumor arises in the inside of the fore-leg below the knee; sometimes, though rarely, it is seen on the outside, and even on the hind legs. After having existed some time, they seldom occasion lameness, except so situated as to interfere with the action of the tendons or ligaments of the legs. During the forming stage, the horse is lame because the periosteum or covering of the bone is inflamed, but after this has subsided and the bony exudation is thrown out, it disappears, except in the case above mentioned. In some cases in the beginning, the feet are hot and painful, the animal likes to remain lying down; and if only the fore-feet are affected, he puts them down with great care and evident pain, and there is general fever and suffering, which passes off with the more decided local manifestation. If the tumor is of some standing, it may be quite difficult or impossible to cause its disappearance. But happily these old hardened tumors seldom interfere with the essential usefulness of the animal.

TREATMENT.—In most cases if there is heat and feverish excitement of the system, give fifteen drops of the SPECIFIC for FEVER, A.A., and that for SPAVIN, B.B., alternately five times per day, that is, a dose of B.B. morning, noon and night, and a dose of A.A. at say ten o'clock in the forenoon and at three in the afternoon, until the heat and lameness are partially subdued, and then give the SPAVIN SPECIFIC, B.B., morning and night, until the lameness and irritation have entirely subsided. Old cases may only require a dose every day.

THOROUGHPIN.

This may occur either on the knee or the hock. It is in either case a strain of the tendon, resulting in a discharge which in the knee forms a swelling on either side just above and behind the bones of the forearm, and also a swelling behind and below the knee. In the hock, there is a soft swelling on each side, and in front with lameness, tendency to knuckle over at the fetlock; pressure on one side causes bulging out on the other.

Treat as for a sprain.—Give Specific B.B. three times per day, and bathe with the Marvel.

Ring Bone

Consists of an enlargement and ossific deposit (near the fetlock joint) in consequence of a strain and inflammatory action. It may appear on one or both sides of the foot, or completely surround it, giving rise to the name. One or more feet may be affected by it. It is generally recognized by a mere bony enlargement on one or both sides of the pastern, and the lameness is not very considerable. Sometimes not only the ligamentous but bony structures of the joint are involved, compromising the entire joint. A false step or strain of the articular ligaments are the usual immediate causes, to which a hereditary predisposition must be added.

At the commencement bathe the part with the Marvel or Vet. Cure Oil from day to day, and give fifteen drops of the Specific B.B., for Spavin, three times per day. In chronic cases, give a dose morning and night, or even only once per day. Cases of considerable standing will materially improve, and recent or fresh cases may be permanently restored.

Thrush and Canker.

This disease is an inflammation of the lower surface of the sensible frog, which secretes matter of a peculiar offensive smell, instead of healthy horn. The matter issues from the cleft of the frog. In a sound frog the cleft is shallow, but when contracted or otherwise diseased, the cleft deepens even to the sensible horn within, and through this the matter issues. Afterwards the discharge becomes more abundant and offensive; the frog wears off and a fresh growth of horn fails to appear. It then becomes thin, shriveled, contracted and fissured; and as the disease extends, the matter becomes still more fetid, and may terminate in a yet more unmanageable form of disease, namely, *canker*. In Thrush, the frog is painful when pressed upon by the thumb or pincers, or when the animal treads upon a stone. As a consequence of neglected thrush, the horn may separate from the sensible part of the foot, and unhealthy vegetations, proud flesh, fungous matter spring up, occupying a portion or the whole of the sole and frog, and finally involving frog, sole and bars, in a mass of putrefaction, constituting the worst form of *canker*.

TREATMENT.—As thrush is often caused by uncleanliness and constant moisture of the feet, the greatest care must be taken to keep them dry and clean, and especially from dung and urine. If connected with contracted fore-feet, particular care must be given to shoeing.

The frog should be carefully pared down and all loose, ragged portions removed in order to prevent the accumulation of matter and dirt. The discharge wiped off by means of tow pressed down into the cleft with a thin piece of wood. Then smear the frog and cleft with a mixture composed of half an ounce of *sulphate of copper* (blue vitrol) and six

ounces of tar made into a paste. A small piece of tow dipped in this mixture should also be placed in the cleft, or in whatever part of the frog a sinus, hole or cleft exists. In bad cases, repeat the dressing daily; in others, once in two or three days is sufficient. If the dressing is properly applied it will not fall out or admit the entrance of dirt. Should the frog be extensively diseased, a bar-shoe may be necessary, and the dressing will then be kept in place by the cross-bar of iron, or a leather sole may be used under the shoe.

Throughout the treatment give fifteen drops of the SPECIFC for ULCERS, I.I., each morning and fifteen drops of SPECIFIC J.K., for the growth of healthy hoof, every night.

☞ The VET. CURE OIL is as efficient as the sulphate of copper, and in absence of the sulphate of copper and tar, the Oil should be applied directly to the canker, on the end of the finger or a thin bit of wood, and be repeated morning and night.

Treatment for Fistulous Withers, "Sweeny." (See pp. 69.)

First remove the cause by taking off and quite altering the bearing of the saddle. If the swelling is recent and does not fluctuate, thoroughly rub in the VET. CURE OIL, repeating the operation every day, giving a dose of Specific B.B. also morning and night. If a cyst exists and fluctuation is perceptible, it must be opened at the most dependent portion, and the matter drawn off, and the part bathed with the VET. CURE OIL, and a portion of it injected into the sack or opening every day. If long pipes or sinuses exist, they must also be opened and the VET. CURE OIL injected. Give also, morning and night, SPECIFIC I.I. daily.

CHAPTER IV.

DISEASES OF THE EYES.

Albugo, or Spot in the Eye, Opacity of the Cornea.

In consequence of a blow, stroke of a whip, or similar injury, an inflammatory action is set up in the eye, the result of which is an effusion of serum between the lamina of the outer coating of the eye, which renders the cornea or clear part of the eye, whitish or opaque in spots, interfering materially with the sight and usefulness of the organ. But little can be done to remove those of long standing, but recent cases, or those where inflammation is just subsiding and the opacity only forming, will be dispelled by frequently bathing the eye with the MARVEL. and giving the Specific, A.A., for INFLAMMATION, fifteen drops three times per day. In many cases of opacity a portion of soft honey, the size of a small pea, put in the eye daily, has been known to have a wonderful effect in removing such opacities.

Amaurosis, Gutta Serena.

This disease consists in entire or partial loss of vision in consequence of paralysis of the optic nerve, or interruption of its communication with the brain. Injuries of the head, or ball of the eye, or some disease of the brain, are the usual causes. The horse walks cautiously, head elevated, and ears move quickly backward and forward, the eye has a

peculiar glassy appearance, and the pupil does not dilate and contract when light is brought near or removed from the eye.

But little can be done for these cases. In the earlier stages a dose of the Specific, A.A., for INFLAMMATION, may possibly arrest its progress, but generally it is incurable in man or beast.

Cataract.

In consequence of injuries to the eye, blows, contusions, etc., or as a consequence of severe and repeated inflammation, the crystalline lens becomes opaque so as to interfere with or altogether destroy the sight. On examining the eye, deep in the pupil a whitish, yellowish, or brownish body is discoverable. Sometimes, especially in the commencement, white streaks run from the centre outward, or the whole chamber within the pupil looks dim and whitish.

Old Cataracts are incurable, but recent and forming cases may be benefitted by giving the Specific, A.A., for INFLAMMATION, and that for INJURIES, B.B., a dose (fifteen drops) every night alternately.

Ophthalmia, Inflammation of the Eye.

There are in the horse two well marked forms of Sore or Inflamed Eyes. ACUTE OPHTHALMIA and PERIODIC or MOON BLINDNESS. Acute inflammation occurs usually in consequence of some irritating substance, hay-seed, dust, etc., having got into the eye, or from overheating, heated foot, or from hereditary predisposition.

SYMPTOMS.—It comes on with heat and uneasiness, the animal keeps the eye closed, or dreads the light, the eye-ball and inside of the lid look red, and

the ball is protruded and the eye secretes a quantity of water, which runs down on the cheek, or of humor, which becomes purulent, and glues the lids together. The cornea is dim and whitish, or covered with a scum, the haw is swollen and red.

TREATMENT.—Examine the eye for dirt, hay-seed, hair, or other substances, and if found, carefully remove them. They are more frequently under the upper lid, which may be turned inside out over the point of the finger, by taking the lashes between the finger and thumb, and turning the lid upward. The eye should be bathed with the MARVEL, diluted one-half with water, or if this be not at hand, make a lotion by putting four or five drops of the Specific for INFLAMMATION, A.A., in a half-pint of pure, soft water, and the eye should be bathed with this two or three times per day, so long as the heat and swelling exist. Give at the same time, in recent cases, fifteen drops of the FEVER SPECIFIC, A.A., four times per day and in old cases the same dose morning and night. Arnica is of little consequence, except where the inflammation is the result of a bruise.

PERIODIC OPHTHALMIA is really a general affection, the result of teething, and usually appears on the cutting of the middle incisors, the molars, and tusks, and hence, at the age of from three to five years.

SYMPTOMS.—Generally only one eye is attacked; the eye looks smaller, swims in tears, and is sensitive to the light, the cornea becomes dim and leaden, and the lens look gray. The pulse is full and frequent; the mouth hot, tongue dry, the water scanty and bowels constipated. There is evidently feverish excitement of the system and congestion of the blood to the head. Not unfrequently the inflammation passes from one eye to the other. Severe or

repeated attacks are very apt to return again or leave as results, dimness of the cornea, opacity of the lens or cataract behind them.

TREATMENT.—Exclude the animal from the glare of the light, and give at once the Specific, A.A., for INFLAMMATION, ten drops every four or six hours. Bathe the eye from time to time with THE MARVEL, diluted with an equal quantity of soft water, or with the lotion mentioned in the case of Acute Ophthalmia. Keep him on low diet and the case will generally be soon relieved. As the eye improves, the intervals between the doses of medicine should be prolonged. Often a dose night and morning is sufficient. Given early it will prevent the development of serious consequences.

The Haw.

We mention in this connection a curious mechanism of the eye more to guard against abuses than to cure disease. Concealed within the inner corner of the eye, the margin only visible, is a black or pied triangular-shapen cartilage called the HAW, with its broad part forward. It is concave, exactly to suit the globe of the eye, and convex without, so as to adapt itself to the mucous lining of the lid, and the base of it is reduced to a thin, sharp edge. At the will of the animal this is rapidly protruded from its hiding-place, and passing swiftly over the eye, shovels up every nuisance mixed with tears, and then being suddenly drawn back, the dust or insect is wiped away as the haw again passes under the corner of the eye. The haw is subject in common with other parts of the eye to inflammation and swelling, and senseless grooms term this "the HOOKS," and have been known to draw the haw out and cut it off, to the lasting injury of the organ.

Such an inflammation only requires the usual treatment, and will be subdued by bathing the eye with THE MARVEL, diluted one-half water, and giving the Specific for INFLAMMATION, A.A., internally, ten drops as a dose and repeated morning and night.

Injuries to the Eye

Must be treated both internally and externally.

REMEDIES.—The MARVEL of HEALING and Specific A.A.

The MARVEL, if the injury has been produced by a mechanical cause, as blows from whip, punctures, etc., and there is much soreness and inflammation, it should be applied externally, in the form of a lotion of one part of MARVEL to three parts of water, and the injured part bathed three times a day, at the same time should be given internally the Specific A.A.

The Specific A.A. should be given, if there is much inflammation, or the eye is congested.

Specific H.H. may be used later, if there is any dimness of the eye left.

Sometimes pieces of hay or chaff get into the eye and cause a great deal of irritation; of course the first thing to be done is to carefully remove them, and then apply the MARVEL, diluted with half water, which, in the majority of cases, is all that is necessary to be done.

CHAPTER V.

DISEASES OF THE CIRCULATORY SYSTEM.

Structure and Action of the Heart.

Before entering on a description of the diseases of the Heart, it may be well to give a brief description of that organ and its functions, for the benefit of non-professional readers.

The heart is placed in the centre of the thorax, in the space between the lungs, and opposite the third, fourth, fifth and sixth ribs. It may be described as a muscular forcing pump, for the transmission of blood to all parts of the body. The texture of the heart is muscular, with tendinous or cartilaginous bands around the openings between the auricles and ventricles, and between the latter and the arteries. It contains four chambers, viz.: two auricles and two ventricles; each auricle communicates with its corresponding ventricle; but the auricles do not communicate with each other, nor do the ventricles. The opening in each pair is guarded by a little valve, in order to ensure the flow of blood in one direction, and to prevent any regurgitation or re-flow from the ventricles into the auricles. We find valves for a similar purpose placed at the origin of the pulmonary artery and the aorta, which proceed from the right and left ventricles, and are the channels by which the blood flows through the former to the lungs, through the latter to the general circulation. The chambers of the heart are lined by a smooth

membrane of a serous character, called the endocardium, which is often the seat of disease; and the whole is enclosed in a fibro-serous sac, called the pericardium.

On examining the heart, it will be found externally divided by a furrow, which corresponds with a muscular septum, dividing the organ into two parts, or two hearts, having no direct communication with one another, except in the foetus. The right side, whose parts are thinner than the left, may be called the venous heart, as it receives the blood in an impure state from the veins, and transmits it through the pulmonary arteries to the lungs, where it becomes exposed to the atmosphere, and converted from venous into arterial blood. It is then conveyed by the pulmonary arteries to the left auricle and ventricle, whence it is propelled through the aorta and its branches to all parts of the body.

The dimension and weight of a healthy heart vary so much that it is not possible to give them accurately, but the average is stated as follows by Mr. Walsh: "It is about ten and a quarter inches from the base to the apex, seven inches in its antero-posterior diameter, and five and a quarter from side to side. In weight, it varies from six and a half to seven pounds. The auricles have much thinner walls than the ventricles, and the muscular substance of the left ventricle, occupying the apex of the heart, is very much thicker than that of the right."

The nerves which supply the heart are the pneumo-gastric and sympathetic.

Idiopathic disease of the heart in the equine race is a very rare occurrence; but, as a consequence or accompaniment of Influenza and fevers of a low type, is by no means uncommon; it is therefore of

importance that we should know how to diagnose both the organic and functional derangement of so important an organ, which can only be done by making ourselves familiar with.

THE ACTION OF THE HEART IN HEALTH.—There are three means by which this knowledge may be attained: first, by *Percussion*, which, in the human subject, affords an index to the size and position of the heart; but in consequence of the less exposed position of that organ in the horse, is of little value, except in diagnosing Hydrops Pericardii. Second, by *Impulse*, or the force of the beat imparted to the hand placed flat on the near side of the chest, just behind the elbow. Third, by *Auscultation*, which is the only reliable way of ascertaining the condition of the heart, and consists in placing one ear, or a stethoscope, in the same position as that already described. Two distinct sounds can be heard; the first, termed the "systolic," is louder and more prolonged than the second (which immediately follows), and seems to depend upon the cantraction of the ventricle; during this contraction the organ elongates and rotates on its axis from right to left, thus producing the impulse and sound on the left side of the thorax. The second, "diastolic," or "flapping," sound, cannot be heard in a fat, circular-chested horse; it is supposed to arise from the regurgitation of the blood, which is in the aorta and pulmonary arteries, forcibly closing the valves placed at their origin in the ventricles, so as to prevent the blood coming back into the heart. These sounds together form what is called the "beat," and are succeeded by a brief interval of repose. In the healthy animal, these beats are uniform and regular, corresponding with the pulse; but in disease there may be, first, increase or diminution in the frequency and strength

of the beats; second, irregular or intermittent action of the heart. In the latter case, we hear two or three beats in quick succession, and then a longer interval of repose than is natural, followed by the consecutive, quick beats and long repose, the number of the former and duration of the latter being singularly uniform. Third, the systolic and diastolic sounds may increase, diminish, or be succeeded by other sounds indicative of disease hereafter described.

Pericarditis—Dropsy of the Heart.

DEFINITION.—Inflammation of the fibro-serous membrane which invests the heart, causing the effusion of a serous fluid. It occurs as a primary affection and as a complication in Influenza, Rheumatism, and other constitutional diseases.

CAUSES.—When met with in an idiopathic form, which is very rare, it may depend upon exposure to damp, cold, changes of temperature, and those unhealthy conditions which also cause acute diseases of the respiratory organs. It may also arise from a sudden change from low, to rich heating food, or from the field to a hot stable. But it usually occurs as an accompaniment of Pleurisy or Rheumatism.

SYMPTOMS.—The horse stands quiet, showing signs of pain and anguish, with sunken head, anxious expression in the face, dilated nostrils, frequent (100 to 120), wiry, and sometimes IRREGULAR or intermittent PULSE, and general intense fever.

The breathing is also accelarated (36) and difficult, and is accompanied by a movement of the flank similar to that seen in broken wind, and by a deep depression along the margin of the costal cartilages. In the early stages, pressure on the left side, and smart percussion in the region of the heart, cause

flinching and expression of pain; and ascultation, *before exudation has taken place*, reveals friction—*to and fro*—sounds. These sounds are, however, not uniformly present in this disorder, nor is their presence an unquestionable proof of its existence, for similar sounds may be do to pleural disease, the latter being characterized by synchronism with the respiratory movements. The friction sounds are therefore of little value, except as concurrent with other symptoms. They also cease when exudation or adhesion has taken place; then the heart's beats are muffled. In the later stages, the heart, which at first palpitates, soon becomes fluttering and uncertain in its beat, conveying a peculiar pulsation to the hand, not easily to be described. No impulse can be felt when the effusion is considerable. Percussion gives a dull sound over the region of the heart, but not so in other parts of the chest, where the respiratory and bronchial sounds may be heard, thus distinguishing Hydrops Percardii from Hydrothorax. The breathing gradually becomes more distressing, and movement aggravates the distress; the pulse more feeble and even imperceptible at the jaw; the ears and legs cold; the legs, sheath, chest, abdomen, etc., œdematous; and the general wasting rapid till death ensues.

Diagnosis.—The friction sounds, and pain on percussion in the region of the heart, with irregularity in its beats, and a peculiarly anxious expression of countenance, are the principal pathognomic symptoms—to which Delafond adds dyspnœa, attended by an action of the flank like that of a broken winded horse. The great difficulty is to distinguish this disease from Pleurisy, which may be done by accurately marking the period at which the frictional sounds occur, viz.: during the systole or beat

of the heart, whereas for Pleuritis we hear it during the respiratory movements of the lungs. When the pericardial fluid becomes much increased, the friction sound ceases, as does also the impulse of the heart, which at first usually palpitates, then becomes fluttering, feeble, and intermittent, and at last can with difficulty be heard. Percussion gives a dull sound in the region of the heart, but just behind it, as well as in other parts of the lungs; if there is no disease in them, or Hydrothorax, the resonance in those parts will serve to distinguish Hydrops Pericardii from Hydrothorax.

PROGNOSIS.—In the strong, and in the majority of cases, favorable.

TREATMENT.—Specific A.A., given every three hours, and later four times per day, will be proper.

Endocarditis.

DEFINITION.—Inflammation of the fibro-serous membrane which lines the heart.

This is a very common complication in Rheumatism, and is very acute and dangerous; the danger arising less from the fatality of the acute stage than from the lesions which are consequent upon it.

SYMPTOMS.—In Endocarditis the contractions of the heart are energetic, vibratory, and often irregular; the pulse is also irregular, and frequently intermittent, and there is a contrast between the feebleness of the pulse and the violence of the heart beats. Leblanc states that this last symptom is characteristic of Endocarditis. He has also observed a loud metallic tinkling, and a *bruit de souffle*, or sound like the blowing of a pair of bellows, or a sawing noise, like bronchial respiration, accompanying the systole of the heart. In the early stages, the breathing is not so difficult as in Pericarditis: but if

the auriculo-ventricular valves are thickened, it becomes distressing. Sometimes the whole of the membrane is thickened; in other cases the lesion is limited; in others, the abnormal growth forms a cardiac Polypus, which may grow to an enormous size. The legs are usually cold.

Pathology.—The endocardium, although a serous membrane, is mixed with fibrous elastic tissue at its valvular reduplications, which accounts for the disease being so frequently associated with Rheumatism, and for the morbid appearances more commonly witnessed in the valvular structure of the heart than elsewhere. The natural result of inflammation in this, as in other serous membranes, is the effusion of lymph, and consequent thickening, which sometimes interferes with the play of the valves, or narrows the auriculo-ventricular openings, thus producing the bellows-sound which has been described as one of the chief symptoms. The inflammation may extend to the muscular substance of the heart, which becomes darkened in color and easily broken down; while in some cases large quantities of fibrin are thrown out, which quite block up the auriculo-ventricular openings and orifices of the large blood vessels. To Endocarditis may also be traced Tumors and Polypi, as well as Hypertrophy and Dilatation. Abscess in the walls of the heart has also been observed as a consequence of Endocarditis.

Diagnosis.—The pathognomic symptoms of Endocarditis are frequently very obscure, being like those of Pericarditis; but it is of very little consequence, as the treatment must be similar. However, the bellows-sound in the former, and the friction-sound in the latter, are sufficient in the majority of cases to point out the nature of the disease when

taken in connection with other symptoms which have been mentioned.

PROGNOSIS.—Owing to the various terminations of Endocarditis, nearly all of a serious character, our opinion as to the ultimate result must be unfavorable, although in the majority of cases the animal appears to recover; but he is found afterwards not as good in his wind as formerly, easily distressed, and when going at an ordinary pace with hounds will probably fall down and expire suddenly. Specific A.A. will be our best resource.

Hypertrophy—Enlargement of the Heart.

DEFINITION.—An abnormal growth of the muscular tissue of the heart by thickening of the walls.

VARIETIES.—There are three. Simple Hypertrophy is the thickening of the walls without any change in the capacity of the cavities. Eccentric Hypertrophy is the thickening of the walls with dilatation of the cavities. Concentric Hypertrophy is the thickening of the walls with diminution of the cavities. The lesion is usually associated with other diseases, and especially with affections of the lungs.

The disorder is slow in its progress, though it soon interferes with the working capacity of the animal. It predisposes to other lesions, such as congestion of the lungs, hemorrhage, etc.

CAUSES.—Excessive effort of the heart to overcome obstruction to its action; constriction of the vessels and of the openings between the different cavities of the heart; deposits on the semi lunar valves; Aneurism of the aorta or the pulmonary artery; excessive physical exertion and consequent exhaustion of the heart. Mr. Pritchard remarks that "horses, particularly those employed in quick

draught, are commonly called on to perform arduous tasks with full stomachs, by which the free action of the lungs is considerably impeded; thus, obstruction being given to the circulation through the pulmonary vessels, corresponding increase of force in the action of the heart is the consequence." Hypertrophy has been often observed in broken winded horses.

Symptoms.—Strong, impulsive movement of the heart, which remains constant; intensity of sound, with a loud, hollow thumping beat; a metallic *bruit* or "clack"; irregularity of rythm; dullness on percussion. The horse is easily distressed, palpitation comes on with ordinary quick work, and there is an anxious expression in his eye on these occasions, which leads us to suspect that there is something amiss with the animal. These symptoms are attended with langour, coldness of legs and ears, dyspnœa, giddiness or Megrims, loss of appetite, and, in a later stage of the disease, with œdematous swelling of the chest, abdomen, and extremities.

Pathology.—The thickening of the walls of the heart may be regarded as a beautiful provision of nature to strengthen the organ and enable it to overcome the obstacle which exists to the free circulation of blood through it. The thickening of the muscle depends upon excess of nutrition consequent on increased action; similar to the change in the biceps muscle of the blacksmith's arm from hard work.

It may be an idiopathic disease not dependent on obstruction; but such cases are very rare. The obstruction will usually be found to depend on disease of some of the valves, or constriction of the aorta or pulmonary artery at its origin. The Hypertrophy may be general, or we may find only

one auricle or ventricle (generally the latter) whose walls are thickened.

DIAGNOSIS.—The increased impulse of the heart, especially after quick work; the irregularity of the pulse and thick wind, without any lung disease being present; and the dullness on percussion over the cardiac region, are the chief pathognomic symptoms.

PROGNOSIS.—Although the disease is incurable, a horse may live for years with enlarged heart.

TREATMENT.—Doses of Specific A.A. will be of value, in conjunction with only moderate work and good care.

Atrophy of the Heart.

DEFINITION.—Emaciation or wasting away of the walls of the heart.

CAUSES.—Similar to those of dilatation. Loss of nervous power through the degenerating influence of fevers induces Atrophy by weakening the muscular fibres of the heart.

SYMPTOMS.—Feeble impulse of the heart, with louder sounds than are usually heard on applying the ear to the chest. The pulse is generally slow, feeble and intermittent. The veins in the neck may also be observed to pulsate. The animal is dull and fastidious in his appetite; dropsical swellings appear on the chest and belly; the legs become cold or œdematous. There is difficulty in breathing on the slightest exertion, and sometimes palpitation or fluttering of the heart.

PATHOLOGY.—There are two forms of Atrophy, one in which there is a wasted and flabby appearance of the organ, whose parietes are so weak that when removed from the body it does not retain the rounded symmetry of a natural heart, but becomes

a shapeless mass when thrown on the ground. This form of Atrophy was frequently met with during the prevalence of the Cattle Plague, and it has been observed in connection with some forms of Influenza. The second form of Atrophy is termed Fatty Degeneration of the Heart. Of this there are two varieties. In one the fat grows on the surface of the organ, encroaching on and insinuating itself between the muscular fibres, impoverishing them, and ultimately causing them to waste; the result is that the muscular walls become thin. In the other variety, fat in a molecular form takes the place of the muscular element, and ultimately fills the sheaths, which previously contained muscular fibre.

Dilatation of the Heart.

DEFINITION.—Enlargement of one or more of the cavities of the heart.

CAUSES.—Some defect in the valvular apparatus, allowing the blood to regurgitate and to distend the cavity, which, by pressure on the walls, causes absorption and attenuation; loss of power in the nervous system; fevers of a sthenic or typhoid character, which weaken the muscular fibres.

SYMPTOMS.—The action of the heart is feeble and tremulous; the pulse small, soft and weak; the least exertion brings on Dyspnœa; there are langour, giddiness, or "Megrims"; the horse is "off his food"; the ears and legs are cold; and ultimately there is œdema of the legs, belly and chest.

PATHOLOGY.—Dilitation may exist either with Hypertrophy or with Atrophy of the walls of the heart, and in the latter case is most probably an effect of the emaciated state of the muscular substance of the heart, which allows the blood to

accumulate, and to distend one or more of the auricles or ventricles.

TREATMENT.—Dilatation and atrophy of the heart admit of very little help in the majority of cases; moderate work and occasional or daily use of Specific A.A., will be proper, and do something towards improving the condition and prolonging the usefulness of the animal.

Palpitation.

DEFINITION.—An abnormal increase in the action of the heart.

Irregularity in the action of the heart is a functional derangement, and not due to organic disease. It occurs in horses that are in feeble health and out of condition, or that have been subject to severe and straining exercise, such as pulling a heavy load up-hill or running hard with the hounds.

Anæmic Palpitation.

CAUSE.—Poverty of blood.

SYMPTOMS.—A dull, thumping sound is heard to proceed from the cavity of the chest, which, in extreme cases, may be heard on both sides, and may even be audible at a distance of some yards, corresponding to the beatings of the heart and pulse; tumultous breathing, redness of the mucous membranes, increased temperature of the body. Auscultation will detect blood sounds in the neighborhood of the heart, large arteries, and veins. These "anæmic murmurs" vary with the condition of the blood, and are caused by its "churning" as it passes through the traversing channels of the heart. They constitute a continuous hum, or the "*bruit de diable*" of the French. In some cases the action of the heart is so great that it causes shaking or jerking of the whole body.

PROGNOSIS.—When the palpitation does not proceed from any organic disease, we may expect to remove it in a very short time by appropriate homeopathic remedies. A dose of Specific A.A. often relieves an attack.

Differences Between So-called Spasm of the Diaphragm (Palpitation) and True Spasm of the Diaphragm (Hiccough).

SO-CALLED SPASM OF THE DIAPHRAGM.	TRUE SPASM OF THE DIAPHRAGM.
Hiccough is seldom present.	Hiccough is always present.
The action of the abdominal muscles is increased and the heaving of the flanks is quite visible. In those cases, where Palpitation occurs from a hard run with the hounds, the diaphragm becomes tired, the abdominal muscles come to its assistance in carrying on the respiration and the heart's action is increased in order to overcome the obstacle which probably exists in the pulmonary arteries.	The action of the abdominal muscles at the flank is imperceptible.
The flanks are tucked up.	There is great fullness in the flanks from the abdominal viscera being pushed backwards.

Spasm of the Diaphragm.

There is a form of palpitation which has received this designation, and has been mistaken for a functional disorder of the diaphragm, or excessive motion of the abdominal muscles. True Spasm of the Diaphragm is Hiccough; and in this condition there are no such sounds as characterize Palpitation.

CAUSE.—The excessive action of the heart, when the horse has been distressed by severe gallops or an exciting run, produces a jerking of the whole body, as the heart strikes the dorso-costal region, towards the upper part of the first false ribs.

SYMPTOMS.—These are much the same as in Anæmic Palpitation; but in addition there is violent elevation of the flanks, perceptible to the observer, and, if being ridden, most unpleasant to the rider. The symptoms appear and disappear suddenly.

TREATMENT.—Give Specific A.A. once in two hours, at first, and later three times per day.

Embolism.

DEFINITION.—Distension and plugging of the arteries by solid coagulated lymph, consisting of fibrous clots, fragments of decaying or suppurating tissue, and the elements of Tubercule and Cancer.

CAUSE.—The reason why there is deposition of the offending material is unexplained; but it is brought from different parts of the circulatory system, from diseased tissues through the veins and the heart, and deposited so as to obstruct larger or smaller arteries, and thus prevent the flow of arterial blood to the limbs and organs. The arteries and hind limbs are most liable to this disorder.

SYMPTOMS.—An accurate diagnosis is not always practicable, because the disease itself is obscure. The symptoms which have been observed attending

Embolism are great pain, profuse sweat, but cold extremities; quick, wiry pulse; and considerable general disturbance of health; anxious expression of face; looking round to the affected parts; rigidity and contraction of certain muscles; partial recovery and simultaneous attack of the other limb, and return of attack to the first; diminished pulse in the arteries of the implicated limb; peculiar throbbing of the posterior aorta felt through the rectum; followed by partial or complete paralysis of the limb or hind quarters; and ultimately death.

Aneurism.

DEFINITION.—A tumor formed by the dilatation of an artery, or communicating with an artery and containing blood. In the first stage the tumor contains fluid blood, and pulsates; in its second stage it contains coagulated blood, deposited in numerous thin layers, resembling the leaves of a book.

Aneurism may be idiopathic or traumatic; the latter is caused by injury to the artery. In the idiopathic or spontaneous Aneurism the dilatation may be of considerable extent, or it may be limited, with the coats of the artery intact or even thickened, or the inner coat may be attenuated and the outer one pressed outward. As the Aneurism becomes old, the coats become indurated, calcified and liable to burst. It is not an uncommon disorder in the horse, and when it occurs it is generally in the deep-seated arteries. The posterior aorta, at the origin of the anterior mesenteric artery, is very subject to Aneurism as animals grow older.

DIAGNOSIS.—This is extremely difficult, for the attendant symptoms may be readily attributed to some other malady. They often come on suddenly; the horse becomes dejected, thin, and unable to

work; respiration is accelerated; pulse and heart-beats are irregular; there is some stiffness in turning, or tenderness on pressure applied to the loins; swelling and cramps in the hind legs; Paralysis.

Phlebitis—Inflammation of the Veins.

DEFINITION.—Inflammation of the tissue of the vein, causing changes in its texture, and a local coagulation of blood, with a tendency to Embolism.

CAUSES.—As an idiopathic affection it is very rare, but as a traumatic disorder, that is, as the result of an injury, it is not infrequent. The most common cause is bleeding, especially when carelessly performed or with rusty instruments; but as the practice is not adopted by Homeopaths, Phlebitis is not so likely to arise with us as in the experience of the "heroic" school.

SYMPTOMS.—The wound is surrounded by a swelling, small at first, larger afterwards, hot and painful. The wound itself is open, the lips being separated, red, moist and acrid, purulent matter, and very irritable. In slight cases, matter may form externally to the vein, which is not much affected, and the part may soon get well. More frequently, however, the swelling increases, the vein above the wound feels hard, cord-like, and hot, and the parotid gland is considerably enlarged. This indicates that the flow of blood has been arrested, and that, in consequence of its becoming stagnant, the vessels passing through the gland are choked. In such a case the vein will undoubtedly be obliterated. Sometimes there is a tendency to hemorrhage from the vein; if this supervene, it will be difficult to arrest it. The loss of a vein occasions some disturbance to the circulation, especially when the head is held down, as when the horse is grazing; but it is not so

dangerous as ulceration of the vein, which causes the introduction of pus into the blood. This may lead to the formation of internal Abscesses, and a consequent fatal issue.

TREATMENT.—Specific AA., once in three hours, and later four times per day.

Varicose Veins.

DEFINITION.—A morbid dilatation of the veins, causing a knotty, unequal swelling, so that their valves, which cannot undergo a corresponding enlargement, cease to be efficient. The effect is a retarded and imperfect flow of blood on the return to the heart.

The disease occurs most frequently in the form of a soft, elastic tumor in the saphena vein, where it passes over the inner surface of the hock joint; but it may affect another vein, or many veins. It is commonly found where the blood has been repeatedly drawn.

CAUSES.—Violent efforts in drawing; strains; inflammation set up by a prick in shoeing; frequent blood-lettings.

SYMPTOMS.—The affected veins are dilated, tortuous, knotted, and divided into separate pouches, with obliteration of the valves. Varix of the saphena at the hock joint is attended with a tumor, which gradually increases in size, is flaccid to the touch, slightly pendulous, and shaking loosely when the horse walks; becoming full and tense on pressure of the vein above it; and capable of evacuation by pressure from below upward.

TREATMENT.—Occasional doses of SPECIFIC A.A. are beneficial.

CHAPTER VI.

DISEASES OF THE NERVOUS SYSTEM.

Convulsions and Spasms, Apoplexy.

Occasionally, in consequence of high feeding and deficient exercise, and especially in fat young horses, with short necks and large blood-vessels, this disease occurs. It may also come on in consequence of drawing a heavy load up a hill, although in this case it is more likely to be a rupture of a blood-vessel, with hemorrhage from one or both nostrils. It is also predisposed by an overloaded stomach.

SYMPTOMS.—In apoplexy, the horse either suddenly falls down lifeless, or there are premonitory symptoms, such as vertigo, the animal holds his head down, or leans it upon something, yawns, perspires slightly, and moves clumsily, etc. Afterwards, the animal falls down suddenly, the circulation becomes disturbed and irregular, eyes red, protruded, and staring; breathing labored, short, rattling; body covered with sweat, and eyelids paralyzed. After a few convulsions the animal dies; or, in rare cases, an improvement takes place, to be again, after a longer or shorter period of time, followed by relapse, or to result in paralysis. (Compare the symptoms with those of Epilepsy.)

TREATMENT.—So soon as any of the premonitory symptoms are observed, give at once the Specific for FEVER and CONGESTION, A.A., fifteen drops, and repeat the dose every one, two, or three hours, until the animal is relieved, and then at longer intervals. If the horse falls under an attack of the disease, give

of the above Specific at once, and repeat the dose every half-hour or hour; remove the harness, etc., and from time to time pour some cold water upon the head, not too much or too violently, while you also give the medicine internally. Injections of salt and water also may be of decided advantage.

Epilepsy.

This disease sometimes appears in the horse, and manifests itself in the following manner: the animal suddenly trembles, remains standing for an instant with legs spread out, staggers, and then falls; convulsions ensue; he kicks, rolls, and twists himself about, grinds his teeth, passes his dung and urine involuntarily, froths at the mouth, the motions of the eye are spasmodic, irregular, and the respiration loud, painful, and sobbing. After a while he becomes quiet, breathing regular, and he gradually comes to himself as if coming out of a dream. The duration of a fit varies from a few minutes to several hours. The attacks return again at periods varying from a few days to several weeks or months, generally coming at shorter intervals. Epilepsy differs from apoplexy as spasm differs from paralysis, and a little attention will not fail to distinguish them.

The causes are deep-seated changes in the nervous organism, and they are rarely curable.

TREATMENT.—Give, on any premonitions of an attack, the Specific for CONVULSIONS, A.A., fifteen drops at once, and you will usually ward it off. For an attack, put a few drops in the mouth as soon as you can safely do it, and repeat it every half-hour or hour, until the paroxysm is ended. Afterwards, always give one dose to prevent a return. This treatment will sometimes avail.

Megrims, Fits, Vertigo, Congestion.

This is rather a frequent affection of the horse, and is a consequence of an undue pressure or rush of blood to the head, in most cases also excited by indigestion or over-fullness of the stomach.

In the milder cases, the horse stops suddenly, shakes his head or even staggers in evident giddiness and half-unconsciousness for a moment, and then goes on again as if nothing had happened. In more severe cases, he stops suddenly, shakes his head, falls or drops down, or after a few unconscious turns and a violent struggle, will become insensible, and then rise up and go on again; such attacks closely simulate true epilepsy.

There are symptoms which indicate such an attack, and are plainly referable to congestion: such as dullness, indolence, dejection, the horse prefers the dark corner of the stable, his eyes are dull, look fixed and stupid, eyelids half shut, inattentive to everything, half asleep as it were, head hanging or resting on the manger. His gait is unsteady, heavy and slow, raises the feet high, and puts the entire sole to the ground, is awkward in turning, and can scarcely back at all. As the disease progresses, he becomes more and more insensible; mastication is performed slowly, dropping part from his mouth; prefers taking his food from the ground, and in drinking plunges his head into the water above his nostrils. Then there are violent moments, the animal runs on quite blind until some obstacle stops him; or he turns round, or remains tranquil, with head depressed and legs crowded beneath his body, without being able to change this unusual attitude, unless assisted to do so. The pulse is very slow, respiration slow, often sighing, tongue foul, mouth dry and clammy.

TREATMENT.—In all similar cases, whether incipient or fully developed, give first the Specific, A.A., for CONGESTION, fifteen drops, and repeat it every quarter or half hour, until the animal is relieved, or for twelve or twenty-four hours, and then at intervals of say four hours, alternate it with the Specific for INDIGESTION, J.K., until restored. When this dozing, stupid condition mentioned above is present, indicating evident congestion to the head, fifteen drops of the Specific for CONGESTION, A.A., each morning and noon, and the same for INDIGESTION, J.K., at night, will soon restore the animal again.

Paralysis.

Paralysis, entire or partial loss of nervous power over the muscles of certain parts or portions of the body, occasionally occurs in the horse as a consequence of mechanical injuries, severe cold, or some internal cause.

When occuring in the face, the muscles of one side lose the power of motion; the lips hang down, and seem swollen, are drawn to one side, or pulled upward; food is picked up and retained with difficulty, mastication is imperfect, and food drops readily from the mouth. Sometimes there is no feeling in the face or lips.

When the hinder part of the body is paralyzed, the horse is unable to rise or stand, sits on his haunches like a dog, and constipation and arrest of urination are very apt to be present. In slighter cases, the hind legs sway about clumsily, or he drags them after him, or even walks on his fetlocks.

TREATMENT.—The first course, in case of recent paralysis, is to give the Specific for CONGESTION, A.A., fifteen drops every two hours, which continue

one day; then give the Specific, J.K., for PARALYSIS, fifteen drops every four or six hours, according to the circumstances, until relieved, and then morning and night for a time.

Inflammation of the Brain, Phrenitis, Mad Staggers.

This disease is most frequently met with in entire horses, and attacks especially those that are ardent, in high condition, but little worked; and it is liable to be excited by a chill after being over-heated or over-worked in hot weather. It may also arise from blows or similar injuries on the head.

SYMPTOMS.—In some cases it comes on slowly; the horse is dull and sleepy; rests his head on the manger, or places it against the wall or between his legs, and falls asleep. In this state he will, perhaps, stagger and almost fall to the ground; he, however, wakes up, stares about him, takes a mouthful of hay, chews it slowly, and ere long is again dozing or fast asleep. The eyelids are nearly closed; the eyes and nose red; the pupils dilated; the bowels bound, and pulse slower than in health. This is the congestive stage, and may continue until the animal recovers or dies; but, in general, other symptoms appear to which the name Mad Staggers may be more appropriately applied. In such cases the pulse rises; the breathing is quickened; the nose and eyes are very red; nostrils widened; the eyes have a wild, fierce look; the feet are stamped, as if in passion; he plunges about the stall, rears upward, strikes out with his fore-feet, and falls backward upon the ground, where he lies panting and covered with sweat; his eyes are thrust forward out of their sockets, and rattles are heard in the throat. Towards the end these violent paroxysms are repeated

from time to time, and it is very dangerous to approach or go near him. At last, he is so weak and prostrate that he cannot rise, and amidst convulsions, strangling, foaming at the mouth, sweating, and panting for breath, the animal dies.

TREATMENT.—The treatment will not be difficult, or the result doubtful, during the congestive stage; but in the fully developed or phrentic stage, quite so in both respects. The Specific for INFLAMMATION and CONGESTION, A.A., is the principal dependence, and a dose of fifteen drops may be given every two or three hours, at first, and as the horse improves, the intervals may be somewhat prolonged. Continue this treatment steadily and without deviation. During the paroxysms, the medicine may be given by means of a small glass syringe, or the Medicator used in a similar manner. After the more intense symptoms have passed over, some doses of the remedy for INDIGESTION, J.K., alternately with that for INFLAMMATION, A.A., will be of value, giving one in the morning and the other at night.

Concussion of the brain, inducing symptoms and a condition not essentially varying from the above, requires the same treatment, together with such external applications as the wound may require.

Tetanus, or Lock-Jaw.

This disease is more common in the horse than in other domestic animals. It consists of a muscular spasm of the jaw (whence its name), which usually from thence extends to all the muscles of the body. It most frequently occurs in consequence of an injury or wound, such as broken knees, open joints, severe bruises, nicked or docked tail, castration, wounds of the feet, prick of a nail, or even the galling of a crupper. It is also caused by cold or

damp, sudden arrest of strangles, worms, or a bad condition of the stomach.

SYMPTOMS.—In general it comes on very slowly, but also, in some cases, with great violence. The muscles of the neck and jaw are first affected, so that the horse has great difficulty in swallowing and turning his neck. The muscles then become quite stiff; the mouth is nearly closed; the jaws cannot be parted, and little or no food can be taken into the mouth. By degrees all the muscles become affected with the same stiffness and cramp; the eyes are still and staring, pulled back into their sockets, and squinted outward, and the haw is thrust forward; the neck can not be bent and the muscles feel hard and firm, the head can not be raised or lowered, and is held forward, with the nose stretched out; the nostrils are expanded; the ears pointed forward, erect, and fixed; the lips are firmly stretched across the teeth, which are partly seen; the salva flows from the mouth; and the horse looks anxious, and can scarcely move, the belly is hard and tucked up; the tail is lifted up and held straight out, and in constant tremble; the legs are firmly fixed to the ground, and spread out from each other; the bowels are bound, and urine passed with difficulty; the breathing is quickened, labored and convulsive; the pulse is disturbed easily by frightening or speaking angrily to the horse, and it becomes afterward weak and trembling. While the spasm of the muscles continue, the animal is in constant pain, although it is less severe at some times than others.

TREATMENT.—Where a wound or injury has taken place, and tetanus supervenes, it will be, of course, traced directly to this, and the wound should at once be treated as recommended for that particular case. If the discharge has suddenly stopped, it should be

reproduced by mild, warm applications to the part.

To relieve the local injury before mentioned, the bran poultice is usually best, and it should be applied quite warm, and be repeated every two or four hours, or when it gets dry or cold. Look carefully and see if a nail has been driven into the quick of the foot or some such injury done, and always relieve the local injury as far as possible. The horse should also be treated with the greatest possible kindness and not be handled roughly or unkindly. The groom must not shout or speak angrily, and too much light must not be admitted to the stable for the same reason. Everything must be done in the most kind and quiet manner possible, as you have here not only a muscular spasm, but a congested condition of the brain also. Before giving the medicine, the lips, mouth and tongue should be cleaned with a cool, wet cloth or rag, and the salava or mucous cleared away. If the tongue or lips are dry, moisten them freely with cold water before giving the medicine. Bathe the head and neck freely and the stiffened muscles along the sides of the neck, from time to time, with the MARVEL OF HEALING, and it will be well to inject into the anus a quart of linseed or olive oil to quicken the movements of the bowels.

At the first indication of any *stiffness* of the *jaws*, or *contraction* of the *eye-brows* or any *other muscle*, which are usually the earlier symptoms of Lock-jaw, give SPECIFIC A.A., a dose of fifteen drops, and repeat the dose every hour.

If the disease has been occasioned by a *strain in the back or joints of the legs* or injury of other *large muscles*, you may profitably alternate SPECIFIC J.K. with the SPECIFIC A.A., thus giving the A.A. one hour and the J.K. the next hour.

If the disease has been occasioned by a *prick of the foot* or any injury of any *tendon* or like structure, give the B.B. in alternation with the A.A., as noted above, instead of the J.K. In like manner the SPECIFIC H.H. may be indicated and given in alternation with the SPECIFIC A.A. where the kidneys have been implicated in the cause and there is *scanty*, *suppressed*, or *difficult staling* as the result.

In cases where the symptoms of lock-jaw have come on while giving the SPECIFIC A.A. and J.K., (a very unlikely result,) it only remains to resort to the LOCK-JAW SPECIFIC T.T., (Tetanine) which should be given in the usual doses and repeated every hour, and continued either alone or in alternation with the SPECIFIC A.A. until the patient is cured.

In all severe or protracted cases, or when the disease fails to yield to the SPECIFIC A.A. or other indicated SPECIFIC, resort must be had to the SPECIFIC T.T., (Tetanine) which rarely fails to restore even advanced cases.

Where we have a case of Lock-jaw, with little or no knowledge of the cause or antecedents, resort must be had to the SPECIFIC for that special condition, the T.T., (Tetanine) which should be given alone or in alternation with the SPECIFIC A.A.; or in rare cases with some other indicated Specific, every hour a dose until the disease yields, when the Specific T.T. may be continued at longer intervals until the animal is quite relieved.

N. B.—In former editions of this work I have recommended the use of ice cold water as a means of relaxing the spasm or Lock-jaw. While this has in some instances been successful, yet the difficulty of the procedure and the uncertainty of the result have induced me to omit the article, and to substitute in place of it the much more convenient and

more successful treatment above—mainly the use of SPECIFIC T.T. (Tetanine). Carefully administered, it will save hundreds of valuable animals hopelessly lost.

FOOD.—When the jaws are firmly set, no food can be given, but there are times when the spasms relax, and the jaws are rather wider than at other periods. Green food and gruel may then be offered to the horse. When the jaws become more open, he may have bran-tea, clover-tea, or hay-tea, gruel, and such similar food. If the jaws cannot be opened, or he cannot swallow, meal or oatmeal-gruel may be injected, by means of a large syringe, into the fundament, and life be thus prolonged and a chance thus given for the SPECIFIC TETANINE to act. Horses have been thus restored by the Tetanine after the most skillful veterinary surgeon have given them up as lost.

Care must be taken to feed sparingly when recovering, or indigestion and a fatal relapse may be the consequence.

Overheating, Loss of Wind.

Often as the result of violent exercise, either in *racing*, *speeding* or violent work in the heat, the horse becomes overheated, out of breath, or collapsed, even to dropping from the insulation, it becomes important to restore the circulation and regain the wind as soon as may be. Give at once SPECIFIC A.A., and repeat every fifteen minutes at first, and later every half hour, or hour. Later give SPECIFIC J.K. three times per day until recovered.

☞ *Between heats* always give A.A., it soonest quiets the heart-beat, and restores the wind and circulation.

CHAPTER VII.

DISEASES OF THE RESPIRATORY ORGANS.

Chill.

This term is used to designate a transitory state or condition, which may either terminate in recovery, or in severe inflammatory disease of some important organ or affection, of which the chill is the first stage. When a chill is present it is impossible to say, with certainty, whether or what further derangement will ensue. But it is quite certain an abnormal condition is already present, with the probability that it will develop some disease or inflammation, of which we now have the first or forming stage. Usually the length and violence of the chill is in proportion to the importance of the organ attacked, and the character of the morbid influence.

The *direct* causes of a chill are: exposing the animal to cold draughts; allowing him to drink freely of cold water, in very hot or during very cold weather; exhausting him with labor and then placing him in a damp stable; washing the legs with cold water, or riding him (while in a state of perspiration), into a stream of cold water.

Symptoms.—The symptoms which are usually observed before the chill proper sets in, are: dullness or want of spirit on entering a stable after a journey; hanging of the head; standing fixedly in one place; taking little or no notice when spoken to; smelling at the food; picking amongst it for a short time and

then leaving it altogether. In addition to these, the eye is dull and countenance dejected; the animal grinds his teeth and breathes quicker than usual, while the pulse is rarely or never disturbed at the commencement. Soon the coat will begin to prick and the animal will begin to tremble with considerable violence; his breathing will become more hurried, attended with a harsh blowing sound in the nasal passages; the pulse still retaining its usual slow beat. Sometimes the breathing becomes quick, hurried, and loud "panting." This condition may continue half an hour, or even two hours or more, when the patient will become more quiet, the breathing softer, more tranquil, the skin and extremities warmer, and the pulse rises to fifty or even sixty beats to the minute. From this condition the attack may, under judicious treatment, pass off, and speedy recovery ensue; or, it may pass into a Catarrhal Fever, or Pneumonia, or Bronchitis, or Lymphitis, or Laminitis, or Inflammation of the Bowels, or what is quite common, a bad, obstinate cough.

TREATMENT.—With as little delay as may be, the patient should be comfortably housed and blanketed, and fifteen drops of the Specific, A.A., for INFLAMMATION, should be given. If not better in half an hour, repeat it, and again at intervals of half an hour, until the trembling and respiration have been relieved and the chill has passed off. Then the animal may be safely left under the influence of the same medicine, to be repeated every two or three hours, so long as circumstances seem to require it.

Should any of the diseases above mentioned, or other, have become developed, the treatment must be varied to meet that condition; the particulars of which are to be sought under the respective sections in this MANUAL. But it will most frequently be

found that having met and conquered the enemy at the threshold, but little more remains to be done beyond care and rest, for the entire recovery of the animal.

The Grippe, or Influenza, Catarrhal Fever, Epidemic Catarrh.

The nose and air-passages are lined with a delicate membrane, whose office it is to secrete a thin mucous which lubricates the parts. Under the influence of a chill, suppressed perspiration, etc., this membrane becomes irritated, inflamed, and the discharge arrested, or it is thickened, increased, or variously modified.

The symptoms usually are, the horse is not so lively as usual; he eats little or no food; he coughs and sneezes; a watery discharge flows from one or both nostrils, and also from the eyes, which are red and swelled.

In the more severe form, there is a chill, warm skin, quick pulse, frequent and somewhat difficult breathing, sore throat, pain in the throat when pinched, frequent cough, rough coat, bound bowels, red eyes, and red and dry nose; tears flow freely, and little or no food is eaten—all symptoms indicating a catarrhal fever. As the animal improves, the discharge from the nose becomes white or yellowish, and more profuse.

Where numerous horses are attacked about the same time, the symptoms assume a more severe form, attended with a greater degree of prostration than in cases of common cold, and it then merits the name of INFLUENZA. The symptoms of one year vary from those of another, and during the same season all animals are not handled alike, though the general outline will be the same. The attending

fever is of a low grade, comes on suddenly, and soon reaches its height, and lowness of spirits and weakness are predominant. The symptoms are often as follows:

The horse is dull, low-spirited, and easily tired; he yawns and hangs his head; his coat stares; sweats easily, and breathes quickly, when slightly worked or moved. He eats little or nothing. As the disease advances, the skin is sometimes hot and again cold; the mouth and tongue are dry and hot; the white of the eye and nose are red; the bowels bound; urine scanty; the eyelids swelled, partly closed, tears flow down the face and fret the skin. The sides of the nostrils are also fretted by the acrid discharge from them, which is sometimes very profuse. The throat may be so inflamed that swallowing is attended with pain and difficulty—the animal "quids" his food, and splashes the water with his muzzle, being afraid to swallow either fluid or solid food. The throat is painful, hot, and swelled on the outside; the glands are also swelled, hard, and painful, and sometimes maturate. The cough is frequent, sometimes coming on in fits, and breathing is sometimes quite obstructed and difficult. When the disease has lasted some time, the dung is slimy and mixed with blood, and the discharge from the nose is sometimes bloody.

A common cold may terminate in inflammation of the bronchia or lungs, by extending downward, or it may be cured and expend itself merely in the nose and throat. So an Influenza may extend and involve the pulmonary tissue, and is far more grave than is usually supposed.

TREATMENT.—When the disease commences with a chill, or any considerable degree of fever is present, give fifteen drops of the SPECIFIC for FEVER,

A.A., and repeat it several times, at intervals of one or two hours. Then alternate the SPECIFIC for COUGH, E.E., with the fever medicine, at intervals of two or three hours, until the disease is broken up and the horse is well. In case of Influenza, even with very threatening symptoms, the SPECIFIC for COUGH, E.E., and for FEVER, A.A., should be given alternately, say every two hours, in doses of fifteen drops; keeping the animal well covered and in a warm stable. After all the feverish symptoms have disappeared, only the COUGH SPECIFIC, E.E., will be required, and the intervals between the doses may be prolonged as the animal improves. In case the discharge from the nose is profuse or thick and excoriating, or when the sore throat is present, or predominates, SPECIFIC C.C. is better than the E.E. and may be given alone, or better, in alternation with SPECIFIC A.A.

When the *legs become swelled*, with *scanty urine*, SPECIFIC H.H. should be interposed, either alone or in alternation with Specific C.C. at the same intervals and doses, and this may be continued to the conclusion of the case, either alone or in alternation with the SPECIFIC E.E. for COUGH.

Canadian Horse Disease.

This disease made its appearance in the Canadas, in the winter or early spring of 1872, and gradually, but sometimes with rapid strides, extended southward along the great lines of travel, attacking successfully a very large prcportion of all the horses in the entire country. Answering the laws which govern all great epidemics among men, it extended in succession over all our large cities, and involved

with a greater or lesser degree of severity, the entire open country, subjecting to its influence almost every horse within its range.

The immediate fatality was not great, yet almost every horse was affected, and with few rare exceptions, all laid up for several days, while in numerous cases fatal termination occurred from want of care, work during the attack, exposure, and from the violence of the disease in old, worn out animals, or those predisposed to lung diseases, or improper medical treatment.

Pure blood stock was less seriously affected than coarse animals, and the disease was much more serious and fatal among the latter.

The disease is essentially a Catarrhal Fever, of an epizootic nature, the result of some atmospheric influence, as is shown by its sudden appearance over a large extent of country, attacking with but slight discrimination all kinds of horses, old and young, and those in good condition as well as the poor or enfeebled.

The premonitory symptoms are: Dullness, low spirits, hanging the head, easily fatigued, and sweats on exercise, a staring coat, a *watery discharge from the nose*, speedily followed by a severe hacking cough; or the warning cough precedes all other symptoms a day or two. The pulse becomes quickened, and the mouth hot; the nasal mucous membrane becomes injected and red, pinkish, or even lead color, and the ears and legs unnaturally cold. Gradually the discharge from the nose increases, and becomes of a greenish yellow color, and as the disease extends along the mucous surface, the throat becomes sore, the glands involved, and the swallowing impeded, painful and difficult, and as the bronchia becomes involved the respiration is

increased in frequency, and in some cases becomes labored and difficult.

In the progress of the disease, the glands may become swelled, and even suppurate, the throat filled with superficial ulcerations, resulting in profuse and debilitating discharges from the nose, or the disease process may involve the entire larynx, bronchia, and even pulmonary tissue, giving rise to difficult, oppressed breathing, imperfect æration of blood, and other results of pneumonia.

As the disesse yields, the temperature of the patient becomes more uniform, the pulse and heat lowered, the breathing more free, the discharge thicker and diminished in quantity, the sore throat yields, and appetite and general condition improve until convalescence is established.

PREVENTIVE TREATMENT.

You may, by taking more than usual care of the animals during the prevalence of an epizooty, and before the symptoms declare themselves, *prevent* the access of the disease by giving fifteen drops of the SPECIFIC, C.C., for DISTEMPER, every morning and night, during its prevalence. If the attack is not fully prevented, it may be so modified as to be of but slight consequence and readily controlled.

TREATMENT DURING THE DISEASE.

With the first symptoms of the disease, dullness, staring coat, *watery discharge from the nose*, slight, occasional, or even severe cough:—commence by giving fifteen drops of SPECIFIC C.C., which may be repeated every three hours during the day, giving a dose late at night, and then, unless the animal is very sick, it may be omitted until the early morning, when it should be resumed, and so continued from

day to day. As the disease yields, or the animal improves, the medicine requires to be given less frequently, and the doses may be given at intervals of four and six hours.

Should the disease be more advanced, and especially should there be *fever* manifested by a chill, heat of the mouth or surface, increased frequency of pulse and respiration, severe frequent cough, even should the ears and legs be unnaturally cool or cold, the SPECIFIC A.A. should be given, at intervals of three hours, alternately with the C.C.; that is, fifteen drops of A.A. should be given, and after three hours, fifteen drops of C.C., and so on, in alternation at intervals of three hours. This alternation of remedies should be continued until the circulation is equalized, the cough and respiration relieved, and a general improvement manifest, when the A.A. may be omitted and the C.C. continued at intervals of four or six hours until the cure is complete.

Should the secretions from the nose become diminished, or dried up with *increased difficulty of breathing*, which is evidently painful and labored, showing the development of Pneumonia from the extension of the disease to the lungs, the SPECIFIC, E.E., for COUGHS, will be required, and may be given a dose of fifteen drops every three hours, giving it alone; or, if there is yet considerable heat or fever, it may be given in alternation with the FEVER SPECIFIC, A.A., until the fever is allayed, when the A.A. may be discontinued and cure perfected by the use of the E.E.

If the cough is not troublesome, but the discharge from the head becomes very profuse, like a nasal gleet, or even the glanders, the SPECIFIC C.C. is only required, and may be given in doses of fifteen drops four times per day, and continued until the

cure is perfected. See also the section on Glanders and Nasal Gleet.

If the legs, sheath, lips or nose swell, or decided dropsy sets in, give the SPECIFIC H.H. alternately with the C.C., fifteen drops every two or three hours, in alternation, which continue until relieved.

For the weakness, dullness, or loss of appetite which may remain after the acute attack has passed over, give fifteen drops of the SPECIFIC, J.K., for INDIGESTION, three times per day. It will promptly improve the appetite and give tone and strength to the system.

NURSING AND CARE DURING TREATMENT.

The animal should be excused from all service, and allowed complete rest. The stables should be clean and well ventilated, and free from any noxious accumulations or exhalations. Lime, Chloride of Lime or White-wash, may be freely employed, but the use of penetrating so-called disinfectants is not admissible under Homeopathic treatment. The patient should be properly groomed, and the nose and mouth frequently sponged, being careful not to communicate the discharge from the nose to the eyes. Better keep a separate sponge for the eyes. The horse should be comfortably blanketed, and if the legs are cold, they should be bandaged. The drink may have the chill slightly removed, but not made so warm as to be unpalatable. The diet should be light, and of a laxative nature. Bran, or spout feed wet with warm water, or made up in a mash, with a little salt added Gruels of meal, oat-meal, mixed with bran or midlins, with a little salt, are best, especially during the height of the disease and prevailing sore throat. Carrots, or similar green food, and hay, in moderate quantities, are allowable.

Exercise in mild, genial weather may be allowed, if the force of the disease has passed, or when it is but slight from the first, and in very mild cases, occasional use may be allowed.

Most animals are sick from five to fifteen days—mismanaged or neglected cases for a much longer period, while some cases run into after diseases which ultimately prove fatal.

Spinal Meningitis.

This disease has become quite common in late years, sometimes appearing in isolated cases, but more frequently prevailing in certain cities or sections of country; and to such an extent as to warrant the idea of an epizootic influence. Often a large number of horses in a city, or quite a proportion of those working a city railroad, are more or less seriously attacked. It is mostly observed in the winter and spring, and is favored by changeable weather, damp or too close stables; appears more frequently on horse-railroad and stage lines, from the frequent sudden stops and severe strain of the loins in starting. Epizootics of this disease have also been observed in low-lying sandy regions, doubtless favored if not caused by hauling heavy loads over deep sandy roads and being exposed when heated and sore from such effort to cold drenching rains. The disease having once been developed from such conditions readily extends itself without the originating conditions being present. It is also more common among mares, from their being overworked or strained when in heat.

THE EARLIER SYMPTOMS ARE: Dullness, indisposition to move, head hanging low, and evident pain and stiffness on moving, and especially on being turned around. It loses intelligence and takes no notice of things going on around him. There is

more or less tenderness and shrinking on pressure on some portion of the spine or along the entire spine, from the hips forward, or on each side over the kidneys. The animal does not stand or move firmly, but sways from side to side or staggers in walking, or seems to drag the hind legs after him, or is easily pushed one side, or even over, or leans against the stall when standing. Finally the back gives out, and the horse falls down, or cannot rise; he has no strength in the hind legs. The pulse at first is not much, or but slightly increased in frequency or force, but by degrees becomes more rapid. The urine is often scanty or suppressed, the dung dry, and the animal has from the first a distressed, suffering look.

When the disease has attained its height, the pulse becomes quick and the temperature raised, and there is swelling of the throat and congestion of the lungs. and in some cases high delirium. Later there is increasing stiffness, paralysis and death.

The disease is frequently fatal in the more severe cases, in two or three days, but often continues from seven to ten days, and recoveries are usually quite slow.

TREATMENT.—Specific A.A. should be given in doses of fifteen drops at first, every hour; then, after six or eight hours—the intervals may be every two hours, and as the animal improves, the intervals between doses may be prolonged to three hours.

If during the disease, THE URINE, or staling should become *very scanty*, or be passed *with difficulty*, or *with straining*, or BE SUPPRESSED, then the Specific H.H., for urinary or kidney affections, should be given a dose of fifteen drops in alternation with the A.A. That is, give the A.A. and after two hours, give the H.H., then after two hours again give the A.A., and so on until the secretion of water is fully established, when the H.H. may be discontinued.

AFTER THE MORE URGENT STAGE OF THE DISEASE HAS PASSED OVER, the heat and fever mostly gone, and there yet remains SOME WEAKNESS OR PARTIAL PARALYSIS OF THE LOINS, indicated by swaying, tottering or shambling gait, the Specific J.K. should be given at intervals of six hours, to complete

the cure. It is the special remedy for partial or complete paralysis, or for the weakness and debility after sickness.

The horse should have a loose box, or wide, roomy stall, well littered and reasonably warm, and in cool or cold weather, be well covered with blankets, and his legs should be occasionally well hand-rubbed. Let him have bran mashes, or carrot tea, and pick at some good hay. The animal should not be exercised or worked too soon after recovery.

Pink Eye.

This disease is well known among horse dealers, and in the stables of all our large cities. It is not so often found in the open country, but cases occur where green or young horses are taken from pasture and subjected to the closer atmosphere and changed diet of a warm stable. It is generally found among green horses who have been brought from the country to our large cities for sale or use, and quite a large proportion of all such horses are more or less seriously affected by it. The disease is really a Catarrhal Influenza, whose symptoms are variously modified and only possibly received the now generally accepted name of PINK EYE, from a frequent appearance of the eye in the earlier stages of the malady. The supposed causes have been sufficiently above hinted.

SYMPTOMS.—There is a wide diversity in the symptoms, but the more common manifestations are as follows: The horse is first observed to be *dumpish*, dull, and disinclined to move, or moving clumsily, and looks as if he had been sick; the vessels of the eye are distended, turgid, the inner lid and corners being unnaturally red (whence, probably, the name),

the lids become swollen, the animal shrinks from the light and tears trickle over the eyelid, and lumps of purulent matter occasionally gum up or fill the angles. The head seems heavy and hangs down, or he rests it upon the manger. First one hind leg and then the other swells and becomes infiltrated with fluid, extending from the fetlock up and filling the sheath, and often along under the belly with an immense infiltration of fluid. This swelling is considered characteristic, comes on suddenly, affects the whole limb, groin and sheath. The hair from the first looks unhealthy, and has a rough feeling; the ears, nose and limbs are cold or wet, according to the stage of the disease. The appetite is poor from the first, and an attempt to swallow shows that the throat is sore; the fauces will be found inflamed, the tongue is foul, thickly coated, and saliva runs freely, though in some cases the mouth is dry and feverish; the dung is voided in small quantities, as all the functions seem torpid. In some cases the glands of the neck become involved, tenderness and swelling is found on examination, and this swelling may soften and terminate in an abscess under the jaw. There is not unfrequently a cough. After a few days, a discharge from the nose sets in, which is considered a favorable crisis.

TREATMENT.—The patient should have the benefit of a pure atmosphere—the more elevated, pure and uncontaminated, the better to arrest blood deterioration—and be covered according to the temperature of the stable and season. The limbs may be rubbed and clothed if cold, but not rubbed if they are hot and feverish. In the febrile stage, the natural covering is sufficient. Fat horses need but trifling food, and bran mashes, scalded spout feed, or green food in moderation are best until the turn of the disease.

Give with the first indication of the disease, the SPECIFIC, A.A., for INFLAMMATION, which repeat at intervals of three hours, in doses of fifteen drops. This may be continued one, two, or more days, so long as the pulse is quick, mouth hot, or general fever, or swelled, reddish eyes. When, however, *the throat* is found to be sore, *glands* under the jaws *swelled or tender* on pressure, or there is a discharge from the nose, the SPECIFIC C.C., for DISTEMPER, is more appropriate, and should be substituted for the A.A., and be given at the same doses and intervals. If, however, there is yet with the above, fever and heat, the two Specifics may be given alternately—first A.A., then C.C., at intervals of three hours between the doses.

After the *legs* and *sheath* have begun to swell, the SPECIFIC H.H., for DROPSY, is in order, and should be given to rouse into activity the urinary secretion, and so reduce the swelling. Give then the SPECIFIC H.H., every three hours, in alternation with the C.C., and so continue until the disease is arrested and the patient is convalescent. Too great care cannot be exercised when the legs are swelled, to *let the horse stand*, not to move or exercise the patient, as the movement or exercise while the legs are swelled or hot, invariably aggravates the difficulty, and may cause it to extend to the lungs or other important organs. Take the feed away, or keep the feed very low, no grain, only a bran-mash, or pick at a little hay, and let the horse stand, and the swelling will disappear with the use of the medicines mentioned, H.H. If from cold or exposure, or an extension of the morbid process, the *lungs should become involved* and Pneumonia be present, the disease will require to be treated by the SPECIFICS A.A. and E.E., as directed for that disease, which see.

Any weakness, or loss of appetite or condition, remaining as a sequel of the disease, will be removed by the use of SPECIFIC J.K., giving fifteen drops three times a day.

Cough.

Cough is so well known as to require no description. It is in almost all cases a mere symptom of some disease or morbid condition of the air passages, such as a cold, bronchitis, catarrh, or other more serious affection of the chest, upon the cure of which it disappears. In some cases, however, this affection is so slight as to occasion only cough as a symptom of its existence, and the cough may be said to be idiopathic. Continued cough predisposes to inflammation, yet some horses have a slight cough for years without being otherwise unwell. Other coughs are connected with thick wind, broken wind, glanders, worms, and indigestion.

TREATMENT.—For all chronic coughs fifteen drops of the SPECIFIC for COUGHS, E.E., morning and night, are sufficient. In more complicated or recent cases, the medicine may be given three or four times per day. Sometimes the SPECIFIC A.A., for INFLAMMATION, is equally or more efficient, even when no fever or heat is apparent.

Spasms of the Diaphragm or "Thumps."

This is a very rare disease in the horse, but may occur in consequence of disorders of the stomach and bowels, or violent exertions when the stomach is distended with food.

SYMPTOMS.—The midriff contracts with so much force that the whole body is shaken and a "thumping" noise is heard at some distance; these thumps are best heard when the ear is placed over the back

at each side of the spine; the pulse is small, from fifty to sixty to the minute, and the breathing from twenty to thirty; the breath is drawn quickly into the lungs, and is attended with a sniffling sound at the nose; the sides of the nose are drawn inward, when the breath is inhaled.

This thumping or spasm differs from palpitation of the heart by the number of beats being different from that of the heart, by the sounds being heard over the back and the drawing in of the nostrils during inspiration.

TREATMENT.—The disease will be cured by giving the SPECIFIC for FEVER, A.A., or by giving the FEVER and COUGH SPECIFIC, E.E., alternately, fifteen drops every three hours.

Heaves, Broken Wind, Thick Wind, Whistles.

These are merely varieties of nearly one and the same pathological condition, and the distinctions lead to no practical result in my method of treatment.

THICK WIND is generally the result of an imperfectly cured bronchitis or pneumonia, leaving either the mucous membrane of the bronchia permanently thickened, or some portions of the lung more or less solidified, thus impairing its capacity and diminishing or destroying its elasticity. Hence, the horse when exercised, especially up hill, breathes short, hurriedly, and more laboriously than in health. This causes much distress, the horse expands his nostrils, heaves, pants and breathes with difficulty.

BROKEN WIND is the result of *emphysema* of the lungs, that is, the minute air-cells in certain portions of the lungs become dilated, lose tneir elasticity or power of contraction, and breaking one into another,

form variously-sized sacks of air, the entrance to which becomes closed, so that this air remains resident in the lungs and so far destroys its use. Spasm of the air-tubes acts in a similar manner, hence it may come and go, but the former condition is more or less permanent. Spasm, or disease of the midriff, is frequently connected with it. The usual symptoms are, the flanks are slowly drawn up until they have a tucked-up appearance, when they suddenly fall down. The act of forcing the air *from the lungs* is far more difficult, and requires longer time than to *inspire* or draw it in. There is also a short, weak, wheezing cough, rough, dry coat; greediness for food, yet the animal is thin and looks poor; the belly is swelled with wind; oats often pass unchanged from the bowels.

TREATMENT.—Some cases of broken and thick wind cannot be cured, as they depend upon organic changes in the structure of the lungs, themselves incurable, yet all can be benefitted and many are entirely cured by the persistent use of the proper Specific remedies, and proper attention to food and work.

In all cases of this disease, of whatever variety, if recent or extensive, give fifteen drops of the COUGH SPECIFIC, E.E., noon and at night, and the same of the SPECIFIC A.A., each morning. In old, long-standing cases, give fifteen drops of the SPECIFIC A.A., every morning, and the same of SPECIFIC E.E. at night, continuing the treatment with perseverance.

FOOD.—As the animal suffers from want of space in the chest, so the distension of the stomach with an undue quantity of food tends much to increase the difficulty Hence the most condensed form of food is best, plenty of oats and little hay, but no chaff, straw, or bloating feed, water in moderate

quantities, but never to repletion until the day's work is over. Green food, carrots especially, are always useful. They are readily digested, and are peculiarly beneficial to the respiratory organs. On the contrary, bloating, flatulent, poor feed, will tend to increase, and may even occasion, broken wind. The horse should not be worked soon after a full meal.

Bronchitis.

From exposure to wet and cold; sudden changes of weather; turning the horse into a cold, wet place, or bringing him from grass to a warm stable; standing in a draft of cold air, or washing the warm, sweating skin and not drying it afterwards, an inflammation of the bronchial tubes and minute air-cells takes place, meriting the name of BRONCHITIS.

SYMPTOMS.—The disease generally begins with a slight cough, quick breathing, sore throat, low spirits, dislike of food, slight discharge from the nostrils, pain of the throat when pinched, and some difficulty of swallowing. In some cases, it comes on suddenly with shaking; the legs, ears and muzzle are at one time hot and at another cold; the skin is rough and staring; the head hung down; mouth hot; the animal remains standing, and does not wish to move; pulse is full and quick; the cough short, frequent, and irritating; the breathing quick and difficult; the eyes and nose red, and rattles are heard in the windpipe at the breast. A profuse discharge of matter from the nostrils indicates the period from which improvement commences.

TREATMENT.—Give the SPECIFIC for FEVER, A.A., and that for COUGH, E.E., fifteen drops alternately every three hours, beginning with SPECIFIC A.A. After a day or two, as the animal improves, the

intervals between the doses may be prolonged to four or six hours. Keep the animal well covered and protected until recovery takes place. After the feverish symptoms have disappeared, the COUGH SPECIFIC, E.E., may be relied upon for the perfection of the cure, given three or four times per day.

STABLING AND FOOD.—In all cases of serious disease of the lungs or air-passages, the horse should be placed in a large, roomy stable or stall, into which the fresh air may freely come, but all damp draughts of air excluded; all dung, damp and dirty straw carefully removed; spread clean straw on the floor; blanket him according to the season, the state of the weather, and skin; hand-rub and flannel-bandage the legs every night and morning, or oftener if necessary.

For food, bran mashes, gruel, and tempered water only; when recovering, malt or bran mashes, boiled oats, turnips, carrots, and green food, if in season.

Inflammation of the Larynx, Laryngitis.

The larynx is the upper portion of the windpipe, and inflammation of it sometimes occurs and is very dangerous. It is not often unmixed, but is generally accompanied with, or is an extension of, cold or bronchitis, and its causes are the same.

It is sometimes a dangerous disease, and may kill by suffocation or degenerate into bronchitis or pneumonia. It is recognized by the difficulty of respiration, WHICH IS LOUD AND HEARD AT A DISTANCE.

The outside of the throat is hot, painful and swelled; swallowing is sometimes difficult, and the fluid even may return by the nose; the breathing is short and difficult, and when the air is drawn into the lungs, a rough, harsh sound is heard in the

larynx; the cough, at first short and hard, becomes more hoarse and feeble, and occurs in fits, especially during an attempt to swallow; the pulse is quick, hard and full, and skin hot. As the disease advances, the breathing becomes more difficult, and is attended with a rasping, crowing sound, the neck is straightened and held stiffly, the head raised and larynx drawn towards the breast, the nostrils are widened, the nose lead colored, the eyes red, skin damp with sweat, the pulse becomes weak and irregular, and at last from the increasing narrowness of the windpipe, the horse actually dies for want of breath.

TREATMENT.—The treatment is by no means difficult or complicated. Give the SPECIFIC, A.A., for INFLAMMATION, fifteen drops every hour, during the violence of the disease, and until the difficult breathing has abated and the animal becomes comparatively easy. Then the intervals may be prolonged to two and then to three hours, or more, until entire relief is obtained. If a cough remains, the E.E. may be given in alternation with the A.A., to complete the cure.

Should the windpipe be very sore to the touch outside, it may be occasionally bathed with THE MARVEL with advantage.

Sore Throat or Quinzy.

This form of disease often occurs in connection with, or as a mere symptom of a *Cold* or *Bronchitis*, and only requires to be treated in connection with those affections. But it sometimes appears as a more isolated disease, and deserves consideration accordingly, the affection involving the food pipe and the surrounding tissues more than the windpipe.

SYMPTOMS.—The throat is quite hot, painful, swelled on the outside; it is painful also internally, and the horse has difficulty in swallowing his food; he "quids" it, that is, partly chews and then drops it; refuses to drink, musses about in the water or swallows with evident reluctance and pain; the glands under the jaw and below the ears are swelled, hard, and painful, and sometimes maturate; sometimes in swallowing fluid it returns again by the nose; slaver drops from the mouth; as the swelling of the inside of the throat about the top of the windpipe increases, the breathing becomes more and more difficult, and the animal at times seems nearly suffocated; and there is always fever.

TREATMENT.—Commence with the SPECIFIC, A.A., for INFLAMMATIONS, of which give fifteen drops every two hours; after, say three doses, give the SPECIFIC C.C., in alternation with the A.A., at intervals of three hours, and so continue until the disease is conquered. Bathing the outside of the throat with THE MARVEL will be of essential advantage, and will expedite the cure.

Nasal Gleet.

This is the term applied to an old, long-standing running from the nose. It arises from a morbid condition of the lining membrane of the nose, and is often the result of a badly treated or neglected cold, especially in old, worn out horses, and is similar to catarrh in the human species. Sometimes a diseased tooth in the upper jaw may give rise to a similar discharge, but this is not a true gleet. An almost incredible quantity of thickened mucous of different colors sometimes passes; if the horse is at grass, almost as green as the food on which he lives: or if he be stabled, white, straw-colored, brown, or even

bloody, and sometimes evidently mingled with matter or pus; and either constantly running, or snorted out in masses many times in the day. Sometimes the discharge comes only from one nostril, at other times both nostrils are affected; in some cases the glands under the jaw are enlarged, in other cases no enlargement can be discovered; perhaps after the discharge has been very copious for some time it suddenly stops, and the animal remains free from any discharge for several weeks, when it comes on again as bad as ever; generally speaking, exercise increases the discharge. Horses affected with this disease have been known to continue free from any discharge for six or eight weeks, whilst they have continued to rest; they have been taken to work, and in a day or two the discharge has returned as bad as before.

SYMPTOMS.—The discharge is yellowish or like cream and in some cases greenish. It may be discharged in clots, or of some thickness, constantly flowing, or snorted out in quantities; it may come from both nostrils, but generally only from the left. The glands under the left jaw are often fixed, hard, and painful. The membrane of the nose has a lead color. The discharge may stop for a time, and then come on again, more profuse than before. After continuing a long time, the animal becomes thin and poor, and may finally die of glanders.

TREATMENT.—The SPECIFIC for DISTEMPER, NASAL GLEET, C.C., should be given, a dose of fifteen drops, three times per day. It will be found quite sufficient to entirely control and finally arrest it in recent cases, and will not fail to benefit even the most inveterate.

Pleurisy, Pneumonia, Pleuro-Pneumonia, Inflammation of the Chest.

The pleura is the delicate serous membrane, covering the lungs with one surface, and lining the cavity of the chest with the other. Systematic writers treat of the inflammation of this membrane, Pleurisy, and that of the substance of the lungs, Pneumonia, separately. But as this rarely occurs in fact, and leads to no practical result in the treatment, and indeed can be rarely detected before death, I prefer the more practical course of treating them together. An inflammation of the lungs rarely or never remains so, but eventually involves the pleura more or less, and so an inflammation of the pleura always involves more or less extensively, the pulmonary substance. The best name, and more common type of the disease, is hence PLEURO-PNEUMONIA.

CAUSES.—Catarrh, Influenza, Cold, or bronchial irritation may, either of them, terminate in this disease if neglected, or from fresh exposure. A sudden transition from heat to cold; change from a warm stable to a colder one; neglect of the usual blanketing, or even of other comforts; hard and long riding against a cold wind in snowy weather; loitering in an exposed, bleak place, when the horse is fatigued and warm, without covering. It sometimes occurs when horses are suddenly turned out to grass, or when they have been taken up and turned into a very warm stable. Injuries, contusion, rupture, or great violence done to the chest, is quite sure to be followed by Pleurisy or Pleuro-Pneumonia.

SYMPTOMS.—For conveniences sake, we will indicate the symptoms of these two branches of the disease separately. Pleurisy invariably commences

with shaking all over, followed by a hot, dry mouth, white coated tongue, red nose and eyes, low spirits, want of appetite, anxious look, and hard, quick, wiry pulse. The act of drawing the air *into the lungs* is short, and stops, or is cut off at a certain point, at which time the pain is felt; the act of forcing the air *from the lungs* is full and slow. The pain is increased by coughing and taking full breath which the horse will do if suddenly moved or frightened. If the inflamed side is pressed upon, he gives forth a sound like a grunt; the cough is short; the horse remains standing; the skin on the inflamed side is thrown into folds, and twitches are occasionally seen at the same place. The painfulness of the spaces between the ribs when pressed upon, is quite characteristic, and often exists to an intense degree. The horse shrinks from it with a low grunt, and tries to get away. The skin about the sides of the nostrils and at the ends of the mouth is wrinkled. The neck is lengthened, and nose thrust forward; the horse stands in a crouching manner, and seems uneasy, but does not move. As the disease advances, the pulse becomes more frequent, and afterwards smaller, until it can scarcely be felt; the breathing becomes quicker and more painful and catching, when the air is drawn into the lungs. Then by degrees, no catch is seen or grunt heard, the twitches are not observed, cold, clammy sweats break out over the body, the horse appears dull and stupid, and death closes the scene.

The pleura, like all serous membranes, has a strong tendency to effusion, or exudation of fluid, during an inflammatory action, and in the course of the disease, this effusion, consisting of yellowish serum, is exuded, in quantities varying from a few ounces to a bucket-full. It occurs in all severe

cases, and the fluid either is again absorbed, if in small quantity, or is the immediate cause of death, if in very large quantity, or a lesser amount may remain for a long time, impeding respiration, and forming an empyema or dropsy of the chest. When it exists, the breathing is always labored, and there is *œdema* or tumid swelling of some external part, generally the abdomen, chest, or point of the breast.

By listening with the ear against the chest, the progress of the effusion may be traced from below upward. Above it will be heard the loud crackling respiration and grating peculiar to the disease; below, the dullness and stillness of the lung enveloped in fluid, the absence of sound, marks the line of the accumulated fluid, its increase and diminution.

In Pneumonia, the symptoms differ from Pleurisy, yet the difference manifests itself in this, that in *Pleurisy* there is more pain, and in *Pneumonia* more difficult breathing. Pneumonia is often a consequence of cold, bronchitis, or the termination of some disease of the air-passages, and may begin with symptoms of a cold—rough coat, want of appetite, low spirits, etc. In other cases, it begins with a shivering chill; the legs, ears and skin are cold; the coat is rough; the nose pale and dry; quick pulse, which afterwards becomes frequent and full; breathing at first quick, then panting and heaving; the skin now becomes hot, except *the legs, which remain very cold.* This is *a characteristic symptom and will never deceive;* the nose and eyes are red; mouth hot and dry; the eyes have a yellowish color, and the horse looks uneasy and restless.

As the disease extends, the breathing becomes more difficult, and is attended with heaving of the flanks; the nostrils are much widened; the nose and head held out; the neck lengthened; the fore-legs

are fixed in one place, and spread apart; the nose and eyes have a dark blueish color; the face looks anxious and disturbed; *the legs* and ears are *very cold;* the legs seem fine, and the hair upon them glossy; the cough is more frequent, hard and painful; the horse seems drowsy; there is no appetite; the dung is hard and covered with slime, and the urine high-colored and scanty.

In the last stage, the pulse is small, weak, and can scarcely be felt; the breathing is quicker and more difficult; the breath is very hot; the eyes and nose are lead-colored; the skin is cold, and clammy sweat breaks out upon it here and there; the mouth is cold; the tongue is coated; the teeth are ground every now and then, and twitches are occasionally seen. The eyes become more and more heavy, glassy and dim; the strength becomes less and less; the horse leans against the stall or manger, or wanders around; he staggers and falls; tries to rise, but cannot; groans, struggles and dies.

As an improvement takes place, the horse appears more natural, warmth returns to his extremities, his breathing is more free, pulse softer, fuller and less frequent, cough easier, *and he lies down* quietly, and without uneasiness. These good symptoms rarely or never deceive.

Placing the ear against the ribs, upon various parts of the chest, we may learn with some practice to distinguish the progress of inflammation. In the healthy lung, the air passes in with a slight, rustling murmer, quite characteristic, and which, once heard, will always be recognized. As the lung becomes inflamed, "crepitation" takes place and we hear a sound, slightly cracking, like that made by salt thrown into the fire, or by rubbing the hair between the fingers close to the ear. As by degrees the lung

becomes more intensely inflamed, it is more and more impervious to the air, until it becomes "hepatized" or solid, and gives no sound, and no resonance when percussed, or struck upon. These changes are interesting, and afford to the practiced ear clear indications of the state and progress of the disease.

PROGNOSIS.—Horses may get well in all stages of Pleuro-Pneumonia, except in very extensive hepatization, or solidification of the lung, when, if recovery occurs at all, it will be imperfect. The success has gained immensely under Homeopathic and Specific treatment, and hundreds of cases are thus saved, which would be lost under the best directed old school methods, to say nothing of the "hotch-potch" usually employed.

TREATMENT.—Give, the first twenty-four hours, the SPECIFIC for INFLAMMATION, A.A., a dose of fifteen drops every two hours. After that, give the SPECIFIC for COUGH and INFLAMED LUNGS, E.E., alternately with the A.A., at intervals of two or three hours between the doses.

Continue this treatment steadily and uniformly by night, as well as by day, if the attack is severe, giving no other medicine, and making no deviation. After a day or two, with the remission of the more violent symptoms, the medicines for FEVER, A.A., may be omitted entirely, and only the E.E. given, as also after the disease has turned, and during convalescence. After the horse has commenced to improve, a dose of the E.E. every four hours during the day, will be sufficient to complete the cure. The treatment is the same whether symptoms of Pleurisy or Pneumonia predominate.

Stabling and food as under Bronchitis.

We should bear in mind that in all severe cases of this disease, resolution does not take place under four days, and if an improvement takes place in one, two, or three days, we should be satisfied. Rare indeed will be the cases that do not terminate favorably under the Specific Homeopathic practice, carefully applied.

CHAPTER VIII.

DISEASES OF THE DIGESTIVE ORGANS.

Dentition or Difficult Teething.

The cutting or shedding of the teeth, and especially of the tushes, is sometimes attended with considerable disorder of the body. The animal either will not eat his food, or he has pain and difficulty in chewing it; the body grows thin; bowels are out of order; humors may break out in the skin, and there may be cough and slight fever present. The gum is hot, painful and swelled.

TREATMENT.—Give the SPECIFIC for FEVER, A.A., fifteen drops three times per day. This soon relieves the feverish irritation, and the tooth usually makes its way quietly to the surface. Nicking the gum directly over the tooth in the form of a cross is sometimes beneficial. If teeth are very slow in coming, showing an evident deficiency of bony deposit, an oyster-shell burned to lime, and broken or ground in his feed, will promote the growth and production of bone, and be of service.

Diseased or Irregular Teeth.

Sometimes the teeth of a horse present irregularities. Some of the teeth are too long, or become ragged. As a consequence, the tongue or cheeks are wounded, and the horse eats imperfectly, has pain, drops or "quids" his food. Whenever this condition is found, if the difficulty does not mend itself, the

long teeth should be extracted if loose, or be filed down, and the points of the ragged teeth smoothed off.

Decayed teeth produce similar symptoms. In addition, a bad smell exudes from the mouth; stringy saliva flows away in large quantities, and the eyes may be inflamed. If allowed to remain, the fang may become diseased, the socket and gum inflame, an abscess form, and a portion of the jaw-bone may die. If in the upper jaw, the matter may burst into the nose and be discharged. It is of bad smell and color, and has been mistaken for nasal gleet and glanders.

Examine carefully with the finger, and by feeling along the jaw, see if there is any swelling or indentation, or if there is any old stub or loosened tooth, a milk tooth that has been pushed one side, or down, or is loose, making the gum inflamed or painful and preventing the animal properly eating his food. If so, remove the stub or loose tooth, or file off the ragged portion, so that the mouth may become sound and healthy. Sometimes a thick, unhealthy discharge from the nostrils has been mistaken for glanders, when the real difficulty was from diseased teeth.

TREATMENT.—Draw out the diseased tooth, and give the SPECIFIC for INFLAMMATION, A.A., each morning, and that for NASAL DISCHARGES, C.C., at night; a dose of fifteen drops, for several days.

Lampas.

Occasionally the bars of the mouth swell and rise to a level with, and even beyond, the teeth, occasioning soreness, pain, and difficulty of eating. It is most common in young horses, in connection with the cutting and shedding of teeth, from congestion

and the extension of the inflammation of the gums during this process. It also occurs in old horses; for the growth of teeth in horses continues during life. Derangement of stomach, or worms, is sometimes connected with it.

TREATMENT.—The FEVER SPECIFIC, A.A., may be required two or three times per day; a dose of fifteen drops. This will soon relieve the irritation and swelling. Should there be any derangement of the digestive organs, a few doses of the SPECIFIC for INDIGESTION, J.K., given morning and night, will promptly relieve not only the derangement of the stomach, but the Lampas also.

Swelling or soreness of the gums will be promptly cured by the use of the SPECIFIC J.K., a dose of fifteen drops per day, or even morning and night.

The searing of the bars with a hot iron, as is sometimes practiced by cruel and ignorant smiths, cannot be too strongly condemned. It tortures the horse to no purpose, renders the mouth callous, and destroys the delicacy and sensibility of a part upon which all the pleasure of driving and riding consists, while it is totally unnecessary.

Crib-Biting.

Much has been written upon crib-biting. It is generally regarded as a vicious habit, but is, I think, connected more or less intimately with a more morbid condition of the digestive organs. The horse stands with his neck bent, lays hold of the manger with his teeth, and violently sucks in wind, and then again, with a grunt, belches it out. It frequently occurs when eating, and the food and a large amount of saliva is either again thrown into the manger or upon the ground. The habit is very inveterate, and said also to be taken or imitated by one horse

from another. Wind sucking is a variety of the same thing.

TREATMENT.—The SPECIFIC for INDIGESTION, J.K., should be given daily, fifteen drops, morning and night. Omit for a few days, and then go on again. In many cases the disease or habit may be cured entirely—in all, benefitted. In any case it is better to remove the manger or rack, or whatever the animal cribs upon, and to feed the horse from a bucket, and also give the hay upon the floor. You thus break up the habit and remove the occasional cause, though an inveterate "criber" often becomes a "weaver."

Loss of Appetite.

Loss of appetite, or diminished appetite, is but a mere symptom of some more general affection. It is a symptom of almost every disease, and especially of every morbid condition of the digestive organs. There are cases, however, in which this seems the most prominent symptom; and the animal appears well in every other respect, save that he does not eat. The teeth should be examined, and, if needful, corrected. We should see also if the throat is sore. In general, loss of appetite will be found connected with a morbid or unhealthy condition of the digestive organs, and will yield to a few doses of the SPECIFIC for INDIGESTION, J.K., fifteen drops morning and night. This is also the appropriate Specific for defective appetite or the weakness which often remains after acute disease.

Ill Condition, Indigestion.

In consequence of over-feeding, bad food, suddenly changing the kind of food, working the horse too soon after eating too much food, or bad and uneven

teeth, which prevent the horse from chewing his food well, the following condition presents itself:

SYMPTOMS.—The skin has the condition known as hide-bound; the horse sweats easily; he is weak, and cannot work so long or with so much spirit as in health; he is thin and does not fatten; his tongue is foul; mouth slimy; the dung is dry, mixed with undigested oats, or it is slimy or bad-smelling; the water is variable, scanty and thick, or clear and abundant, and there is a short, frequent cough. Sometimes he eats very greedily, and at others will eat nothing placed before him, or will take one kind of food and leave another, or he likes dirty straw or his bedding better than the best oats or hay, or, in some instances, his morbid appetite leads him to lick the wall or eat plaster from it.

TREATMENT.—Correct the feeding. Give not too much, and only that most acceptable at first. Give SPECIFIC J.K. three times per day for a week, then J.K. morning and noon, and SPECIFIC I.I. at night, to complete the cure.

Stomach-Staggers.

The cause of this condition is excessive repletion and distension of the stomach with undigested food. It occurs also from weakness of the stomach, bad condition, old age, eating too much dry food after long fasting, violent or hard work immediately after a full meal. These causes prevent the digestion and passage of the food, and, as a result, congestion of the brain and staggers.

SYMPTOMS.—Are similar to those of mad staggers at the commencement, and are principally known from each other by the manner in which the disease comes on. The horse is found dull and sleepy;

perhaps still eating slowly and carelessly; or he is fast asleep, the head upon the manger, or against the wall, or between his legs; the breathing is slow and labored; the pulse slower than in health; the eyes closed or nearly so; slight convulsions occur; the nose and eyes look yellow; he will sometimes paw on the ground, look around to his flanks, or lie down and roll, showing that he is griped and uneasy. All these symptoms become worse by degrees until the animal dies.

TREATMENT.—Give the SPECIFIC for INDIGESTION, J.K., fifteen drops every hour, and continue this treatment until relieved. But if the staggers increase or show more tendency to engorgement of the brain, the SPECIFIC for STAGGERS, A.A., should be alternated with that first mentioned, in doses of fifteen drops, repeated every hour at first, and then at longer intervals, and the two may be continued in this manner until relief is obtained. If the dung should be dry, scanty, or suppressed, large and frequent injections of tepid water will be of great value.

Colic.

This is one of the most common diseases of the horse. The passage of food along the bowels is effected by the alternate contraction and relaxation of the muscular coat of the intestines. Hence it is easy to perceive that flatulent or irritating food, food in too large quantities, large quantities of green food that produce much gas, masses of hard, dry dung, or sudden chill upon the warm skin, all may produce irregular contraction of the intestines, and hence produce pain and colic. Tumors, worms and stones also produce the same result.

SYMPTOMS.—In colic the attack begins suddenly. The animal is uneasy; shifts his position, paws or

stamps the ground, kicks his belly with his hind feet, looks frequently at his flanks, groans, falls upon the ground and rolls about violently, or lies on his back, in which posture he remains for a short time, seeming quiet and free from pain. Soon, however, the pain comes on again, even with symptoms of greater intensity than before. He throws himself widely about, careless of the injuries he receives during these moments of agony and tossing. He grinds his teeth, bites the manger, and looks towards his flanks with a wild, anxious expression. If he improves, the paroxysms become less frequent and less violent, and free intervals longer, until entire relief; or if worse, the pain becomes more and more intense, paroxysms more frequent, until there is no free intervals; inflammation results, the ears and legs become cold, pulse small and wiry, and the animal dies from the results of the inflammation.

Many of the symptoms of colic are similar to those of inflammation of the bowels, and as the latter is by far the most formidable disease, we will endeavor to distinguish them, so as to avoid mistake.

The attack of colic is sudden, while that of inflammation is more gradual. In colic, the pulse is rarely quickened, and never so early in the disease, while in inflammation it is very quick and small even from the first.

In colic, the legs and ears are of the natural temperature. In inflammation, they are cold. In colic, there is relief from rubbing the bowels, and from motion. In Inflammation, the bowels are very tender, and motion vastly augments the pain. In colic, there are intervals of rest, while in inflammation there is constant pain. In colic, the strength is scarcely affected, while in inflammation there is great and rapidly increasing weakness.

Attention to these peculiarities will enable one to distinguish between the two diseases, and to avoid error in the treatment.

TREATMENT.—We have in the SPECIFIC for COLIC, F.F., a remedy which rarely fails to arrest this disease. Give fifteen drops on the tongue, and repeat the doses every half, or even quarter, of an hour, until relieved, omitting the medicine altogether, or giving it at longer intervals as soon as the amendment is perceived.

If, at the commencement or during the progress of the disease, fever and inflammatory symptoms should also exist, then alternate the FEVER SPECIFIC, A.A., with that for COLIC, F.F., at the intervals mentioned.

If the attack has clearly been occasioned by an *over-feed*, or by bad, heavy, indigestible food, it will be best to alternate the SPECIFIC for INDIGESTION, J.K., with that for COLIC, F.F., at the intervals directed.

The colic not unfrequently comes from the kidneys, which may be suspected by the horse making frequent attempts at staling, or his passing scanty, thick or bloody urine. In these cases, give the H.H. SPECIFIC for kidney disease, fifteen drops every half hour, alone or in alternation with the A.A.

Should there be suspicion that Bots or Worms are an exciting cause, the WORM SPECIFIC, D.D., may be alternated with that for COLIC, F.F., fifteen drops every half hour or hour.

N. B.—In cases of colic the greatest danger and the worst possible fault is injudicious haste and giving *too many and improper things*. Thousands of horses are killed by the drugs given to cure colic where one dies of the disease itself. Give only the Specific Remedies, and at the intervals as directed, however urgent as the case may appear. Your success and safety are in following the directions implicitly.

Tympanitis, Drum-Belly or Wind-Colic.

This is merely a form of colic characterized by an enormous production of flatulence. The pain is sharper, the animal more furious and violent than in ordinary colic; the belly on both sides is more or less swelled with wind; there are rumbling noises and frequent discharges of wind. It is usually the result of eating or gorging with green, flatulent food.

TREATMENT.—Give fifteen drops of the SPECIFIC for COLIC, F.F., every half hour, or even more frequently if the case is very urgent. It will soon be relieved. Afterwards, a few doses of SPECIFIC J.K., fifteen drops morning and night, will be of benefit.

Enteritis, Inflammation of the Bowels, Red Colic.

There are two varieties of this disease, one in which the external coats of the intestines are inflamed, and attended with constipation, and the other, in which there is irritation of the internal mucous surface of the intestines, and attended with purging.

The most frequent CAUSE is sudden cold upon a warm, perspiring skin, or even a cold drink when very hot; over-fed horses, subjected to long and severe exercise, are most liable to it; stones and hard dung in the bowels; and especially colic badly treated, and drugged with all sorts of medicines, often terminates in Inflammation of the Bowels.

The symptoms of this disease are very like those of colic, only in the latter disease there are intervals of rest, or cessation of pain, and there is little or no alteration of the pulse; whilst in inflammation of the bowels there is *no abatement of the pain*, but

the animal is continually lying down and rolling about, getting up and then dropping down suddenly. The pulse is very much quickened, small and hard; the artery appears like a cord, under the finger; the extremities are cold; the animal frequently turns his head toward the flanks; the abdomen is hard and tender; as the disease advances, the breathing becomes accelerated, the eyes staring and wild, the pulse imperceptible at the jaw; a cold sweat breaks out over the whole body. This state continues for some time, when suddenly the animal appears to get better, he gets up, and stands quietly; the eyes lose their lustre, the extremities become deadly cold, there is a tremulous agitation of the muscles, particularly the fore part of the body; after a short time, he begins to totter and stagger about, and soon falls down headlong, and dies.

Symptoms.—The disease begins, in most cases, with dullness, heavy eyes, staring coat, restlessness and moving about from one place to another; the pulse and breathing are both quickened; no appetite. Some cases begin with colic, others with shivering. The animal paws, kicks, and rolls about in the most violent manner at first; often strains and tries to pass water, but either none or only a few drops come away; the pain is most intense, and does not cease for an instant, and is increased by pressure and moving about; the belly is hot, tucked up, and hard, unless there is wind in the bowels, when it will be more or less swelled; the bowels are very costive, though small, hard, dry masses may be passed, except in cases where the internal surface, or mucous membrane, is the seat of disease, in which case small, purging, bloody stools are frequently passed; the legs and ears are intensely cold; the pulse small and hard; and sweat in the latter stages breaks out all

over. Still further on, the pulse becomes smaller and weaker, until it can scarcely be felt; the breathing is quick, irregular, and attended with sighs; the skin is covered with a cold, clammy sweat; the eyes seem to have lost their power of seeing, he becomes very weak, and trembles all over; convulsions come on, and death soon follows.

Consider carefully the distinctions between Colic and Inflammation, as given under the article on Colic.

TREATMENT.—As early as possible, give the SPECIFIC for INFLAMMATION, A.A., fifteen drops, and repeat the doses every half hour. After the animal is somewhat relieved, continue the medicine at longer intervals. If not better in two hours, the SPECIFIC for COLIC, F.F., may be alternated with that for Inflammation, at the intervals mentioned. This will be especially indicated if there should be frequent purging small stools, blood-stained or otherwise. After the inflammatory symptoms have subsided, a dose or two of the SPECIFIC J.K., for INDIGESTION, will complete the cure.

N. B.—As constipation exists in inflammation of the bowels, many persons suppose it to be the cause of the disease, and resort to the most desperate means to remove it. This is all wrong. Remove the inflammation, and the bowels will then move of themselves, while the balls and cathartics administered during the inflammation will only increase the difficulty, and often even prevent the possibility of a cure.

Peritonitis, Inflammation of the Peritoneum.

The delicate membrane lining the abdominal cavity, and covering the parts within it, is termed the peritoneum, and is occasionally the subject of inflammation.

It not unfrequently follows the gelding of the horse, especially if he is too soon afterwards turned out to grass, or during cold and wet weather. Exposure to cold, standing in draughts of air, or drinking cold water, may produce it; and it follows a stab in the belly or a rupture of some of the viscera, and the flow of the contents into the abdomen.

SYMPTOMS.—A few days after cutting the colt, the yard and sheath will be found swelled and painful; little or no matter flows from the cut; the animal is restless and uneasy; the body is painful when pressed against, and is swelled with watery fluid; the legs are cold; the bowels are bound; the skin is rough and dry; no food is eaten; if loose, he rests his hind-quarters on the side of the stall; the swelling in the breast, legs and sheath increases; the breathing becomes quick and painful; the pulse hard, quick, and by degrees small and weak. These gradually become worse, until the animal dies.

There is a slow form of this disease, as follows: poor appetite; low spirits; uneasiness; occasional pawing the ground; looking at the belly and groaning; belly painful when pressed upon, and tucked up; quick breathing; small, weak pulse; bound bowels; awkward way of walking with the hind legs; mouth dry and bad smelling; body thin; coat staring and unthrifty; urine scanty; weakness. As the disease advances, the abdomen fills with a watery fluid, and the disease terminates as dropsy.

TREATMENT.—From the commencement, the SPECIFIC for INFLAMMATION, A. A., is the most important remedy, and may be given fifteen drops every two hours, during the more urgent symptoms, and then at longer intervals for the acute form.

If there should be purging, alternate the SPECIFIC for DYSENTERY, F. F., with that for INFLAMMATION,

A.A., at intervals of two hours, and then less frequently as the disease improves.

In the slow form of the disease, the alternate use of the SPECIFIC for INDIGESTION, J.K., and that for COLIC, F.F., four times per day, will be found most effectual in preventing a termination in dropsy, and in restoring the animal.

Diarrhea, Purging, Scouring, Looseness.

Green food; new hay; worms; excess of bile; cold air or water; quick work, after much eating or drinking, may produce diarrhea. So does aloes, or other purges, which may even kill a horse.

SYMPTOMS.—Frequent and abundant discharge of slime, and dung mixed with slime; pain in the bowels, causing the horse to paw and stamp, look at his sides, and roll about violently; his face is anxious; cold sweat breaks out; his legs and ears are cold; the pulse becomes small and weak; the breathing becomes quickened; body wastes rapidly and alarmingly, and no food is taken. Death occurs from exhaustion. Also in colts.

TREATMENT.—SPECIFIC F.F. four times per day will generally relieve. In case of *young* colts give SPECIAL F.F.x every two hours.

Dysentery, Flux.

Dysentery is most liable to occur in horses in good condition, and is caused by change of food, and overwork, or sudden exposure to cold and wet.

SYMPTOMS.—There are frequent passages of slimy, bad smelling, fatty matter, like "molten grease," which is more or less mixed or stained with blood. This is passed off with much straining and effort,

and with frequent unsuccessful straining or attempts to effect a passage. The mouth is hot and dry, the legs cold, the breathing quick, no food is taken, the pulse is small and weak, there is great thirst, and the horse becomes thin and weak. Not unfrequently, in straining, the gut is thrust out of the fundament.

TREATMENT.—Should there be considerable heat and fever, it will be as well, or better, to give a few doses, fifteen drops, of the SPECIFIC for FEVER, A.A., at intervals of two hours.

Then, after two or three doses of A.A., give the SPECIFIC for DYSENTERY, F.F., a dose of fifteen drops, every two hours, until relieved. As the disease improves, the intervals between the doses may be increased. The persevering use of the remedy will cure all cases.

Jaundice, Yellows, Diseased Liver.

Young horses rarely have diseased livers, but at the age of eight or nine years, the disease is more common, and, in some cases, quite suddenly, the covering of the liver gives way, and symptoms of fatal peritonitis appear.

SYMPTOMS.—Jaundice, or Yellows, is more frequent, and is marked thus: The animal is dull, sleepy, and unwilling to move; he eats little or nothing; the coat stares; the urine is scanty; the dung dark-colored and in lumps. The nose, tongue, eyes and mouth become yellow, from the abundance of bile in the blood. The dung becomes mixed with bile, and covered with slime; the urine is very thick, dark-colored and full of bile. The right side is painful when pressed against, and the horse looks towards it; he may be lame in the right fore-leg, or paw the ground with it. These symptoms may increase, and cough, quick breathing, and full, quick

pulse, be added, which afterwards becomes quite weak and slow, and the legs very cold. He then becomes more and more dull, stupid and sleepy, staggers, falls to the ground, and dies.

TREATMENT.—Rarely will anything more be required than the SPECIFIC for JAUNDICE, J.K., of which a dose of fifteen drops may be given, four times per day.

Should there be heat, fever or inflammatory symptoms, a few doses of the FEVER SPECIFIC, A.A., will be proper, not merely for the heat and fever, but for the obstruction of the liver as well. In severe cases, these two remedies may be alternated with the most brilliant success, even when there is no fever apparent. Give fifteen drops every four hours, alternately, first A.A., next J.K., and so on.

Costiveness, Bound Bowels.

This is usually a mere symptom of some other disease, upon the removal of which the costiveness disappears. But sometimes, in consequence of dry food, deficient action of the liver, want of exercise, or a paralytic condition of the digestive organs, it may require attention.

TREATMENT.—The animal should have regular exercise, green food or bran-mashes night and morning, with but little oats, or other heating or dry food. Give, night and morning, fifteen drops of the SPECIFIC for INDIGESTION, J.K., and the condition will soon be corrected.

Bots and Worms.

Bots in the horse, like worms in the human system, have usually a great many sins to answer for, which are really chargeable elsewhere. It is a principle in the economy of nature, that one animal should feed upon or live within another, and hence every

animal, and almost every organ, also, has its peculiar parasite or inhabitant. Such parasites are rarely injurious. In an unhealthy condition of the system, they may unduly accumulate, and occasion some inconvenience, but they rarely feed upon the surface to which they are attached, but only upon the contents of the organs in which they exist.

The history of the bot, the most formidable of horse parasites, is as follows: Towards the close of autumn, the female gad-fly (octrus equi) fixes its eggs upon the hair of the horse's legs, by means of a sticky substance, exuded with the egg. By means of the horse's tongue and lips, these eggs are carried to the mouth, and so on down to the stomach, where the eggs, farther developed in the form of grubs, are attached, by means of their hooks, to the sides of the organ, while their heads remain floating in its fluids, upon which it feeds. Having arrived at maturity, they are separated, pass along the intestines, and are expelled with the dung, after which they again burst the shell, and rise in the summer in the form of the gad-fly.

Symptoms.—Some horses are supposed to suffer much from bots, while others, in the most perfect health, have an abundance of them. Often there are no symptoms to indicate their presence, but generally, when in great numbers, the horse loses flesh and strength, until he becomes a skeleton, and can scarcely move about; he has turns of griping pains in the belly; eats and drinks greedily; the oats pass off undigested, and the dung has a bad smell. The only sure criterion of the existence of bots or worms is their presence, hanging about the anus, or mixed with the dung of the animal.

There are also the *long round worms*, similar to the common earth worm, and the *small pin-worm*, half

an inch or more in length, which often causes itching and uneasiness at the anus.

TREATMENT.—To eradicate worms or bots from the system, give fifteen drops of the WORM SPECIFIC, D.D., each night and morning, with regular and healthy feed, and the worm symptoms will soon disappear.

For Colic or belly-ache, when supposed to be from bots, give fifteen drops of the SPECIFIC for BOTS, D.D., alternately with that for FEVER, A.A., every half hour or hour, according to the urgency of the case. A few doses will usually relieve.

IN OBSTINATE CASES, when the Bots seem to be constitutional, give fifteen drops of the SPECIFIC, D.D., every morning, and the same of J.K., for Unthriftiness, every night, and so continue until good health is established.

Salivation—Slavering.

Many horses are subject to an increased flow of saliva from the mouth, constituting what is known as *slavering* or *driveling* from the mouth. The discharge is commonly simply glairy slime, or at times—and especially on being driven or excited—a simple froth, dropping or being blown from the mouth. It may be caused by mercury if the horse has been dosed with the drug; is often attributed to Lobelia or Indian tobacco, if the horse only would eat it—but is more commonly the result of swelled gums, irregular or deficient teeth, and irritated or inflamed salivary glands, the result of bad digestion.

TREATMENT.—See that the teeth are in order, and give SPECIFIC J.K., morning and night. It often cures promptly, and in very bad cases wonderfully helps.

CHAPTER IX.

DISEASES OF THE URINARY ORGAN.

Nephritis, Inflammation of the Kidneys.

The kidneys are not unfrequently the subject of inflammation in the horse. It may be induced by powerful or repeated diuretics, such as saltpetre, which is a most dangerous medicine, or from hard and long riding by a heavy rider, or heavy weights; or by leaping or being suddenly pulled up on his haunches, the inflammation being propagated from the lumbar muscles to the kidneys, or by exposure to cold and wet, by rain dripping upon his loins during exercise, and especially if these organs have been previously weakened.

Symptoms.—The early symptoms are those of fever, the pulse full, hard and quickened, afterward becomes small and weak; the horse looks around anxiously at his flanks; stands with his hind legs wide apart; is unwilling to lie down; straddles as he walks; expresses pain in turning; the back is somewhat arched; he shrinks when the loins are pressed upon, and there is some degree of heat felt there. The urine is voided in small quantities; frequently is high-colored, and sometimes bloody; and there is frequent and often violent effort and straining, but the discharge is very small, sometimes suppressed.

TREATMENT.—Give fifteen drops of the SPECIFIC for INFLAMED KIDNEYS, H.H., and repeat every two hours.

Should there be very high fever, great heat, etc., the SPECIFIC for INFLAMMATION, A.A., may be alternated with it, giving fifteen drops every intermediate hour in urgent cases, but in general the first-named SPECIFIC will be quite sufficient, and should be continued at prolonged intervals to entire recovery. But a few doses will be required to show us the great value and efficacy of the remedy.

Cistitis, Inflammation of the Bladder.

This disease is usually the result of giving diuretics, such as saltpetre, cantharides, or similar irritating medicines. It may also be the effect of a cold and exposure, or of a stone in the bladder, and the disease may occupy the neck of the bladder, or the organ itself. The symptoms are similar to that of Inflammation of the Kidneys; the horse makes frequent and painful attempts to stale, but passes only a few drops of water at a time. The bladder cannot retain the urine from its excessive irritability, so that the attempt to void it is constantly going on. The urine may be clear, or mixed with mucous, or stained with blood.

The TREATMENT is the same as for Inflammation of the Kidneys, the SPECIFIC for that disease, H.H., being given every two hours, in doses of fifteen drops, or less frequently, according to the urgency of the case. In some cases, the SPECIFIC for INFLAMMATION may be given in alternation, as for Inflammation of the Kidneys; but in general, the remedy first mentioned, H.H., will be found every way efficient and available.

Hematuria, or Bloody Urine.

This is usually a mere symptom of some other disease. Blows, or a violent strain of the loins, some kinds of irritating plants, stones in the kidneys or bladder; ulceration of the bladder; Spanish flies given internally or administered as a blister—may either of them produce bloody urine as a symptom.

The symptoms are: discharge of urine, mixed more or less with blood, or containing clots. When the blood is caused by some disease of the kidney, there is usually pain in walking, straddling of the hind legs, and an awkward way of walking. If the blood comes from the kidneys, it will be intimately mixed with the urine; but if from the bladder, it will pass off with the last of the urine rather than the first.

TREATMENT.—Fifteen drops of the SPECIFIC for URINARY DISEASES, H.H., given three times per day, will generally promptly relieve. If dependent upon organic disease, more time may be required, but the remedy is the same. If it fails, give a large spoonful of THE MARVEL, poured upon the tongue three times per day.

Retention of Urine.

From holding the urine too long, cramp or spasm of the neck of the bladder, stone in the bladder, or other disease, which prevents the bladder contracting upon its contents, there may be retention, and the animal unable to void his urine.

The symptoms are similar to those in colic, but characterized, however, by the horse putting himself in the attitude of staling, and straining with great force, as in the act of passing water, without any, or very little, being discharged. This symptom may be present in cases of gripes or colic, the

bladder acting in sympathy with the cramped intestine. All doubt may be removed by inserting the hand into the rectum, when the bladder, if full, will be found large, tense and full of water.

This disease may be recognized by the animal frequently putting himself in a position to pass urine, but without succeeding, or at most only a few drops are voided; there is also great restlessness, shifting from place to place, moaning, looking at the flanks, pawing with the fore feet.

TREATMENT.—A few doses, fifteen drops each, of the SPECIFIC for SUPPRESSED URINATION, H.H., given at intervals of two hours, will not fail to relax the spasm and afford entire relief.

When it is the result of a stone in the bladder, the movements of the horse may for a time dislodge it, but an entire cure will only be effected by an operation, for which a veterinary surgeon must be consulted.

Scanty Urine.

This is a mere symptom of some other disease, such as fever, inflammation, or other morbid condition, or it may occur naturally, if there is diarrhea, loose bowels, or purging, and it always occurs in warm weather, when a horse is severely worked, from the large quantity of fluid exhaled from the skin and lungs.

A few doses, fifteen drops each, of SPECIFIC for SCANTY URINATION, H.H., will soon correct the condition, as far as the health of the animal requires. The SPECIFIC for INDIGESTION, J.K., is likewise efficient.

Diuresis, too Profuse Staling.

In consequence of bad food, such as kiln-dried oats, mow-burnt hay, or of such medicines as nitre or other diuretics, a horse may have an excessive flow of urine.

The symptoms are: The horse does not eat much, sweats easily, is soon tired, the bowels are costive, skin dry, and coat rough, tongue white, and there is great thirst. The water is quite clear and milky, passed often, and in large quantities. As the disease advances, the horse eats nothing, he gets thinner and weaker every day, breath often offensive; the dung is hard, lumpy and covered with slime; the hair stands on end, and the flow of urine becomes enormous. If not cured, death ensues.

TREATMENT.—The food must be changed, and none but the best given. Change of food is always of service under such circumstances.

Give fifteen drops of the Specific, J.K., for INDIGESTION, four times per day. This will often be efficient.

Diabetes Mellitis.

DIABETIS MELLITIS, which is a rare disease in the horse should not be confounded with DIURESIS, which is manifested by an *increased* flow of urine. In Diabetes Mellitis the water is clear or greenish, limped, *sweetish*, passed in *immense* quantities, at first easily, later with difficulty, and soon accompanied with great debility and hectic fever, usually ending fatally.

For this disease you can send to the COMPANY for a SPECIAL DIABETES SPECIFIC.

PARTURITION IN MARES rarely requires either manual or medicinal assistance. A dose of Specific A.A. given in the earlier stages of labor often quiets the restlessness and allays the wandering pains, and this conduces to the greater regularity of the process. If the labor becomes tedious or delays, a dose of Specific G.G. repeated if necessary every two hours will relax the parts and assist the expulsion pains.

Self-Abuse, Seminal Emissions.

A very common habit among race horses is self-abuse. As soon as young horses are stabled, from idleness or over excitement they may begin to masturbate, and it very often increases, impairing their strength, and rendering them worthless and uncertain foal-getters; or demanding castration. The phenomena are well known and do not require a particular description.

The common practice with horsemen or trainers is to put on them what is called a "net," an apron armed with sharp pointed tacks, so when the yard is protruded, the tacks prick him, and he draws it in. But many horses, with a little practice, become so expert that they can avoid striking the apron, and in most cases it seems rather to increase than diminish the habit.

The usual Veterinary Surgeons advise camphor, which if given in sufficiently large quantities to diminish the habit, will greatly and permanently impair the vitality and vigor of the horse.

It remains for DR. HUMPHREYS' system of VETERINARY SPECIFICS to devise a remedy, which by *arresting* and *lessening* the *unnatural* and *morbid desire*, will *prevent the habit*, and thus, while reducing the morbid desire, promote and increase the natural vigor and development of the animal.

This remedy is SPECIAL VETERINARY SPECIFIC L.L., of which give a dose morning and night, with full exercise and diminished food, and later, a dose daily until the habit is quite overcome.

Not the slightest injury can result from its use, but the contrary. Mild cases have often been cured with SPECIFIC G.G.; more severe cases may require SPECIFIC L.L. daily.

Weak or Deficient Sexual Vigor; Impotence in Stallions or Dogs.

It not unfrequently happens that stallions of even good form and breed, and not deficient from inherited weakness or vice become uncertain or partially unfitted for foal-getting. This must of necessity arise late in life from failing vitality, or deficient natural strength. But it not unfrequently happens as a result of too early severe use, a drain put upon the young at a time when nature was still building up and hardening tissue, and when the over-drain made upon the green and yet unhardened sire, was more than the nutrition could repair. And it is again liable to happen from excessive use during the healthy, vigorous age of life, and the more so, if coupled with insufficient proper nourishment.

Any or all of these causes may render a stallion uncertain, and so diminish his value and the relative value of his services. It becomes important to know what treatment will restore the feeble and uncertain, and will preserve and arrest the decay, as well as restore these waning powers.

In order to restore and invigorate the deficient or waning powers, and to sustain them under severe tax, or upon the decline life, VETERINARY SPECIFIC J.K. may be given in confidence that it will sustain, restore and keep in vigor the natural virile powers.

In cases, with only some decline in vigor, a dose of fifteen drops of Specific J.K. given two or three times per week is sufficient. When the want of vigor is more decided, a dose two or even three times per day may be given.

But there are cases when the sexual virility has become more deeply impaired, either from early masturbation or from excesses later in life, or indeed from causes not fully ascertained. In these more important and inveterate cases the SPECIAL VETERINARY SPECIFIC N.N. should be called into use. Give a dose of fifteen drops morning and night, or even three times per day for a week, then twice per day, and for quite some time even after partial restoration to vigor, let his service or use be very moderate, and so give him service only proportionate to his vigor until fully restored.

CHAPTER X.

GENERAL DISEASES.

Rheumatism.

This is a far more common disease of the horse than has generally been supposed. It is quite common in old horses, and in younger ones that have been exposed or over-worked. Cold and damp, and exposure to draughts of cold air when heated, or during and after severe effort or work, are among the most common causes.

SYMPTOMS.—It usually begins with a shivering chill, hot skin and mouth. The horse becomes lame and stiff all over, and several joints seem affected at once, so that he cannot move from the first, or else it soon becomes confined to one joint or leg; the joint or limb becomes very hot, swelled, and exceedingly painful; the pulse is quicker at one time than another, or stops now and then for a moment or two; the breathing is quick; sweats break out, and the animal becomes weak. When the disease attacks the fore legs, farriers call it "chest-founder"; and when it attacks the loins, the back is raised and belly tucked up, and it is known as "loin-bound." Rheumatism not unfrequently shifts from one place to another, especially if the animal is exposed to wet and cold.

TREATMENT.—If there should be considerable heat and fever, as is most commonly the case, give first the FEVER SPECIFIC. A.A., a dose of fifteen drops,

every two or three hours, until the heat has been partially subdued, or until six doses have been given. Then alternate the SPECIFIC for RHEUMATISM, B.B., with that for FEVER, A.A., every three or four hours, a dose of fifteen drops, until the animal is restored. If a limb or joint is painful, hot and swelled, bathe it in the MARVEL night and morning, and a flannel bandage applied to the limb will also be of great service, in addition to the internal medicines.

If at any time a horse shows symptoms of stiffness or lameness, fifteen drops of the RHEUMATIC SPECIFIC B.B., night and morning, will soon remove it.

Chronic Rheumatism

May be regarded as a continuance of an acute attack, or as is more frequent a recurrence of it, being generally milder in character and less painful. The general circulation, as indicated by the pulse and respiration, is not much affected, and the manifestation of the disease is usually confined to some form of lameness usually affecting one limb at a time. Suddenness of the attack and change of its locality are characteristic of the disease. Often after having been apparently cured it returns after an uncertain interval or appears in another locality. Limbs and tissues that have once suffered are more liable to a recurrence, and it may be generally assumed that when a horse has once had a siege of rheumatism and again has sudden lameness and pain, that it is a return of the old disorder. Bad weather, exposure, or overwork are the most frequent occasions of a recurrence of the attack. The lameness most frequently attacks one or the other leg, or there may be a general stiffness or lameness. Not unfrequently the lumbar or loin muscles become the principal seat

of the disease and the term *lumbago* or *loin-bound* is applied to it; or when the muscles or fibrous tissues of the shoulder become affected, causing lameness of the forelegs, the animal is said to have chest founder.

TREATMENT.—SPECIFIC B.B. is usually the best remedy. If there is fever, heat or some lameness, alternate SPECIFICS A.A. and B.B. a dose every two hours. In old cases and to eradicate the disease from the system, give SPECIFIC B.B. morning and noon and SPECIFIC J.K. at night, not forgetting an occasional dose of SPECIFIC H.H. to increase the action of the kidneys.

Fever.

We understand by pure or idiopathic fever an increased arterial excitement, or increased frequency or force of the pulse, attended with heat, but without local inflammation. Symptomatic fever has the same heat and increased circulation, attended with local inflammation or disorganization of some part, of which the fever is merely symptomatic. Bad management in the stable, impure and unwholesome food, bad air, or confinement, are the usual causes of fevers.

SYMPTOMS.—Idiopathic or Simple Fever generally begins with a cold, shivering chill, or repeated chills, although this is not essential, or may readily be overlooked. The horse is dull, unwilling to move, has a staring coat, and cold feet and legs, This is succeeded by warmth of the body; unequal distribution of warmth in the legs—one hot and the other three cold, or one unnaturally warm and the others unusually cold, but not the corpse-like coldness of inflammation of the lungs; the pulse is soft, quick, and often indistinct; the breathing somewhat laborious; but no cough or pawing or looking at the

flanks. The animal will scarcely eat, and is very costive. While the state of pure fever continues, the shivering fit returns every day at nearly the same hour, and that is succeeded by a warm one, and that often by a degree of perspiration; and these may alternate for several days until local inflammation appears or the fever subsides.

No horse dies of pure fever. If inflammation of the lungs, bowels or feet does not set in, he will recover.

Symptomatic Fever is the result of some local inflammation or disorganization, or the result of injury, wound, etc. No organ or part can long seriously suffer without bringing the system into sympathetic suffering, which generally manifests itself by irritative fever, which of course disappears when the local irritation is removed.

TREATMENT.—In all cases of Fever, the FEVER SPECIFIC, A.A., is the first and generally the only medicine required. Give a dose of fifteen drops, at intervals of two or three hours, at first, and by degrees at longer intervals, and not only will the fever be removed, but likewise all danger of its locating itself upon some organ or part of the system. Should such localization threaten, the FEVER SPECIFIC, A.A., will still be the appropriate and best medicine. This SPECIFIC, A.A., may be continued from day to day, at intervals of three hours. Only if the fever assumes a *typhoid character*, with symptoms of great prostration or debility, give the SPECIFIC I.I., in alternation with the SPECIFIC A.A., at the same intervals.

Distemper, or Strangles.

This is a disease incident to young horses, generally appearing between the third and fifth year, when the teeth are being shed, and is much more

liable to appear in the Spring than at any other season of the year. Almost every horse has it, and but once in a lifetime. It is an idiopathic fever, followed by discharges in various parts of the body, generally under the jaw.

SYMPTOMS.—The disease begins with symptoms of a common cold; the horse is dull and depressed, eats little or no food, coughs now and then; the coat stares, the pulse is slightly quickened, the mouth becomes hot and dry, and afterward frothy fluid comes from it; the throat sore, the nose red, and matter flows from it. The glands under the jaw become swelled, hot and painful, to such an extent as to cause "quidding," or dropping of food when eating, and there is so much difficulty of breathing that the horse at times seems almost suffocated. The swelling, which occupies the centre of the jaw, nearly filling its hollow, is a smooth, uniform body (in distinction from glanders, which is uneven or knobby), becomes larger and softer until it bursts and matter flows out. From this time the animal begins to recover and soon gets well. In some cases, however, the horse does not get well so quickly, for after the abscess in the gland has burst, others form upon the back, shoulders, legs, breast, or about the neck and jaws, and even internally. This form is termed irregular strangles. Strangles is said not to be contagious.

TREATMENT.—At the first, when there is fever, hot and dry mouth, and glands swelled and painful, a few doses of the FEVER SPECIFIC, A.A., given in doses of fifteen drops, at intervals of four hours, or four times during the day, will reduce the fever and swelling, and the disease will run a milder course.

Afterward, the SPECIFIC for DISTEMPER, C.C., should be given, a dose of fifteen drops, three or

four times per day, during the height of the disease, and afterward at longer intervals, until entire restoration.

When the tumor under the jaw becomes hard, large and painful, and suppuration is inevitable, a bran poultice applied warm, night and morning, will hasten suppuration so that it will break of itself or may be readily opened. The poultice may be secured to the place by an eight-tailed bandage tied in front over the nose and back of the ears, so as to keep the poultice in place.

Glanders and Farcy.

I prefer treating these two diseases in connection, persuaded they are one and the same—excited from a common cause, running a similar course, while the contagion of the one will produce the other, and *vice versa*. The disease is termed Glanders when it is principally confined to the head and nose, and called Farcy when manifesting itself in the lymphatics.

It is usually considered as the result of contagion, but want of food, bad food, bad keeping, impure air in too close stabling, will generate it.

Symptoms of Glanders.—*Constant* discharge from one or both nostrils, more frequently from one, and that the left; the discharge is at first thin and watery, afterward thick like the white of egg. It may continue in this way for some time, or it soon becomes more mattery, sticky, then greenish or yellowish, or mixed with streaks of blood, and having a bad smell. Soon after this discharge is noticed, the glands under the jaw become painful and swollen, and one of them appears fixed to the jaw-bone. Then the membrane lining the inside of the nose has a yellowish or leaden color, which is considered characteristic of the disease; small

bladders are noticed upon it, which afterward are changed to ulcers; these have sharp borders, and spread and deepen until the gristle and bones beneath become ulcerated. When ulcers appear upon the membrane of the nose, the constitution of the horse is evidently involved; he loses flesh; his belly is tucked up; coat unthrifty and the hair readily comes off; the appetite impaired; the strength fails; cough, more or less urgent, may be heard; the lungs become filled with abscesses, wasting goes on, and the animal soon dies.

FARCY.—Upon the face, lips and other portions of the body, but especially upon the legs, hard, painful and hot lumps are felt, which are called *Farcy buds;* they increase in size, with pain and heat, until the ulceration works through the skin and a thin discharge flows out. Between these lumps along the course of the lymphatics, hardened cords are felt; the groin, inside the thighs, and space between the fore legs and chest, become, from the tumefaction of these lymphatics, swelled and very painful; the legs are swelled, together with the usual discharge of glanders.

TREATMENT.—The SPECIFIC for DISTEMPER, C.C., is the best remedy for either form of this disease, and should be given a dose of fifteen drops four times per day. During convalescence, it need not be repeated so often.

Should a suspicious discharge appear at the nose, the C.C., given in doses of fifteen drops, three times per day, will usually arrest it in a few days, and prevent further mischief.

A development of *Farcy* requires the same treatment as for *Glanders.* Give the SPECIFIC for DISTEMPER, C.C., four times per day. The horse should have good air and good wholesome food.

In some cases, the alternation of the SPECIFIC for ULCERS, I.I., and that for DISTEMPER, C.C., is very efficient, especially in cases of some standing.

N. B.—It should be remembered that a well marked case of glanders is *highly contagious.* Not only may the disease be communicated to other animals, but the glandered matter coming in contact with a cut, abraded or sore surface in the human subject, will be liable to result as a very severe, if not fatal, case of poisoning. Prudence demands that we should handle such animals with great caution, and a thoroughly glandered animal had much better be killed at once than endanger other animals or the lives of human beings, and the more so as the chance of recovery in such a case is very remote.

Inflammation of the Lymphatics, or Weed.

In some rare cases horses suffer from Inflammation of the Lymphatics, manifested by cord-like swellings along the course of these vessels. It may be brought on by sudden changes of food, cold and wet weather, sudden over-work after several days of rest, disordered stomach, standing in cold water, exposure to drafts of air, etc.

The SYMPTOMS are as follows: The attack is usually sudden, beginning with a cold, shivering chill, followed by full, strong and quick pulse, accelerated breathing; hot, dry mouth, and general fever. The local manifestation is on one of the hind legs, generally the left, or in rare instances, a fore leg may be affected. The leg is lifted from the ground, is hot and painful to the touch, and swells *from above downward.* The swelling increases rapidly, the leg becomes much larger than the other, the pain increases, and the leg is very sensitive

to the touch. Several hard, round and very painful cord-like swellings may be felt on the inside of the leg; these end in small, hardish lumps, and are more painful than the cords. A watery fluid exudes from the skin, and may be seen in drops standing upon the hair.

TREATMENT.—At the commencement, foment the limb for an hour, night and morning, with hot water, and afterward apply THE MARVEL freely. The horse should have plenty of exercise, and in most cases may be ordered to his work, continuing the medicine as hereinafter directed. Give, three times per day, fifteen drops of the FEVER SPECIFIC, A.A. After a few days, the SPECIFIC for INDIGESTION, J.K., may be alternated with the former with advantage. But in general the FEVER SPECIFIC, A.A., will be entirely sufficient.

Purpura Hemorrhagica.

Some rare cases of this disease have been observed in the horse. It consists essentially of a decomposition of the blood, and loss of power in the capillary vessels, as the result of which echymosed or black and blue spots appear on the surface, and upon the mucous membrane wherever it can be seen, hemorrhages occur from various parts of the body and are thrown off with the natural excretions. The inside of the nose is covered with purple spots, as also the inside of the lips. These spots vary in size, and are filled with dark-colored fluid blood, which exudes if they are punctured or scratched. There is diffused swelling over the system, showing itself at the eyelids, breast, flank, belly, quarters, and between the thighs, extending upward. It is attended with weakness and general prostration of the system, swelling and stiffening of the joints, and

sloughing off of the membrane of the nose, or other parts.

TREATMENT.—The SPECIFIC for FEVER and INFLAMMATION, A.A., will be found appropriate in all cases of this disease. Give a dose of fifteen drops three times per day. If there are hemorrhages from any organ, give half a gill of THE MARVEL three times per day, between doses of the SPECIFIC A.A.

Give common food of good quality, less oats and hay, but especially carrots and potatoes. The last are very serviceable in this disease.

Big Head—Big Jaw.

Big head, or big jaw, in colts is an affection of the head or jaw of somewhat obscure origin. It is quite common among blooded stock and may be one of those deficiencies arising from too close or long continued in-breeding.

It shows itself mostly in colts, by first a swelling with heat and tenderness in the bones of the face, along the upper course of the nostril, from thence extending by degrees over the entire head, which becomes enlarged and distorted, giving the name by which the disease is known. The glands, also under the jaw and neck, about the head become swelled. Sometimes the disease begins or first shows itself in the jaw —BIG JAW. There is often some discharge from the nostril, weak, swimming eyes, loss of flesh and strength, until the extensive ulceration of the bones of the head ends in death.

The disease is not supposed to be contagious. But it would be very unwise to let such animals run with sound ones or drink from the same bucket or tub.

TREATMENT.—Better put the colts by them or himself. Give good fresh relaxing food—grass and roots if possible—and give first Specific A.A. morning and night—it often cures. If not, send for SPECIAL SPECIFIC L.J. for LUMP JAW, BIG HEAD, etc., and give as directed.

This course should be perseveringly continued, *using no other medicine or application.* Benefit should be noticed within two weeks and quite decided benefit from the use of the first two bottles, and cure may be looked for from their persistent use.

Loco—or Locoid Horses.

On the great western plains and in California, it is well known that animals feeding upon the wild grasses and other plants, are frequently attacked with a peculiar disease, or symptoms which are attributed to certain plants. This disease is generally called "Loco," simply meaning foolish. The disease is now generally attributed to two or three alied plants of the order of the *Leguminosae*, or pea family. Of these, two species of *Astragalus* are found in California, and another the (*A. mollissimus*) in Colorado and New Mexico, Texas and Arkansas. The latter "*Loco. Weed*" is a perrenial plant, growing with many stalks from a strong root-stock. They are reclining towards the base and erect above. These stalks are so short that the leaves seem to grow directly from the root. They are branching at the base, and give rise to numerous leaves and long stems, bearing the flowers and pods; the leaves are from 6 to 10 inches long, each composed of 9 to 15 leaflets (in pairs, except the upper ones). These leaflets are of oval form 1-2 to 3-4 inch long, of a shining silvery hue, from being clothed with soft silky hairs. The flower stalks are about as long as the leaves, naked below, and at the upper part bearing a thick spike of flowers, which are nearly 1 inch long, narrow, somewhat cylindrical, the carolla of a purplish color, the calx half as long and slightly pubescent. The flower has the genuine structure of the pea family, and is succeeded by short, oblong, thickish pods, 1-2 to 3-4 inch long, very smooth, with some two seeds in each.

The Oxytropis Lambertii—Loco Weed, is about the same height as the one first named and like it grows in bunches, but differs from it in having an erect habit, longer leaves, and larger stifly erect

flower stalks. The leaflets are longer and narrower, about 1 inch long by 1-4 to 1-3 inch wide, and hairy, except on the upper surface. The flower stalks proceed from the root-stock, are usually 9 to 12 inches long, naked, except near the top, with a thick dense cluster of flowers. This plant is very abundant on the high plains, ranging from British America to Mexico. The flowers vary in color, some being purple, some yellow, and others white. We have been thus particular in describing the plants that our friends may know them.

Animals do not readily eat it, but when pressed by hunger or ill fed will do so, and the taste having once been formed, they not only readily eat but are said to crave it, and as a consequence falls with the Loco habit or "LOCOID DISEASE." Among the SYMPTOMS first noticed are—Loss of flesh, general lassitude, and a peculiar form of derangement or animal insanity, attended with FALSE SIGHT AND FALSE HEARING. The animal loses flesh, and there is great lassitude or weakness. He does not see clearly, or sees objects or things that do not exist, and so is alarmed or frightened without cause. His hearing is doubtless as badly disordered; he hears sounds that are only in his head, and not in the air. Frequently when approaching a small object the horse will leap into the air as if to clear a fence, or shie to one side or the other. It cannot be safely driven or even at times be led, from the danger of these crazy fits. Sometimes there may be spasms or convulsions. The animal totters on its limbs and appears as if crazy. Later when the disease has fully developed, it appears a mere muscular wreck, becomes at times stupid or wild, or very vicious, or acts as if affected with blind staggers, rears, plunges, and becomes unmanagable and

unsafe. The horse may linger on for many months or even a year or two, but usually dies from inability to digest his food, or is sometimes killed in his fits or struggles.

TREATMENT.—The Specific A.A., is so far the best remedy, and may be given from one to three times per day. If the water is affected, give H.H., or if the digestion fails, Give the J.K.

AZOTURIA.

This disease is somewhat common, and is often considered a paralysis from this most frequently prominent symptom. But this condition is really due to imperfect action of the liver and kidneys in failing to eliminate only partially oxidized products and the transformation of albuminoids into urea—thus producing the train of symptoms constituting the disease. It mostly attacks animals out at grass, or those who have been for a time idle on good feed, and are then put to active exercise or work; beans, peas, or other like foods are also liable to produce it. The autumn is its most frequent season of attack and mares seem to be more liable to it than geldings.

SYMPTOMS.—These come on suddenly and without premonitions of disease. The animal may be attacked in the stable after having been out for a short time, after a period of rest. In the milder cases there is only some *lameness* and *muscular trembling* of a particular limb, generally the hinder ones, without apparent cause, and on examination there is a dusky brown color of the membrane of the eye and nose, and some tenderness of the ribs when struck; the lameness may be such that the animal may be scarcely able to walk, or may even go down altogether. In other cases the horse is struck down at

once from loss of motive power in the loins and hind legs after having been driven only a short time after an interval of rest. In other cases the attack is not so sudden, the animal becomes very restless, perspires freely, seems to be in violent pain, the flanks heave, the nostrils are dilated, the face pinched, the body trembles violently and shows a disposition to lie down, and very soon, if not already present, the characteristic symptoms appear. These are, *tremors* and *violent spasmodic twitchings* of the *large muscles* of the *back*, *loins* and *hips*, ending in contractions, with more or less loss of motive power. The body trembles violently, the limbs become weak so that they sway and bend, the animal walks crouchingly behind, and soon goes down unable to support himself, the urine discharged is high-colored, thick, and has a strong ammoniacal odor; the pulse varies from 60 to 80 beats per minute, generally weak though sometimes strong; temperature from 102 to 104.5 Fahrenheit, or even higher. The bowels may be regular, and in mild attacks the appetite is not impaired.

In severe cases the animal lies prostrate, plainly unable to rise, refuses to eat or drink, struggles violently in his attempts to raise himself, and coma (insensibility) may supervene; in such cases the conjunctive mucous membrane of the eyes is much congested.

In *very* violent cases the animal is suddenly struck down, struggles violently for a few hours, becomes comatose and dies.

In milder cases the severe symptoms abate, but the animal does not regain the use of its limbs, and though it may eat and remain perfectly conscious, is unable to rise and ultimately dies from some complication.

In favorable cases the trembling, twitches and spasms abate, the urine becomes more natural, the power of movement returns, and in a few days the animal is convalescent, often having for sometime a swelling across the breast like a pad as a result of the dropsical infiltration of this depending tissue.

In other cases, the loss of power in certain muscles remains for a long time, and yet in other cases cerebral complications and death may ensue as a result of defective urinary secretion.

TREATMENT—is much more favorable under our Specific method than by the usual course. Give at first SPECIFIC A.A., a dose every hour for six or eight hours to relieve the vascular excitement and increase the action of the liver and kidneys, then give the SPECIFIC J.K. in alternation with SPECIFIC A.A. at intervals of two hours between doses. Continue these two Specifics for say twenty-four hours, or even longer, and when the animal is easier, and more especially if the urine has *not yet become more free and natural*, interpose SPECIFIC H.H. in alternation with SPECIFIC J.K. at intervals of three or four hours between doses.

Later on and for remaining complications, if such exist, give SPECIFICS J.K. and H.H. two doses of each per day in alternation, until cured.

CHARBON.

This is an epizootic disease with quite an ancient history, mostly prevalent in the deltas, low grounds and river bottoms of our far southern states. At times it prevails over certain sections, carrying off hundreds and even thousands of horses and mules, while other seasons are measurably free

from its ravages. Localities and plantations once seriously affected seem to be more liable than others, and high, dryer and hilly lands are mostly exempt. Dry seasons, with the accompanying drying up of streams, and use of impure, stagnant water, seem to play an important part in originating and propagating the disease, while swarms of flies doubtless carry the infection from the carcas of the diseased and dead to the living animal.

SYMPTOMS.—Usually for some hours before the disease is manifested externally, the affected animal will appear languid, the ears droop and signs of general depression may be noticed, slight swellings soon make their appearance. These swellings are at first about the size of a walnut, or the end of one's finger or thumb, are round or slightly irregular in shape, but are always adherent to a pedicle at the base. They are painful and the parts around them are sensitive; when touched with the finger, a local shivering, like a sub-cutaneous beating is distinctly felt. They are variously located, but nearly always upon dependent parts, as under the neck and breast, between the front and hind legs, along the lower part of the chest and belly, and on the sheath and teats. The sheath in some animals is so enormously swelled as to interfere with urination. The swellings are rarely seen upon the back. Nearly all animals not treated, die in from twelve to thirty-six hours after the first symptoms are noted, the temperature rising to 105 before death.

TREATMENT.—At first and especially during the invasive stage, and so long as the disease is held in check, the horse or mule, dull, dumpish, ears droop, if cold, or hot, or feverish, or whether swellings have appeared or not, give SPECIFIC A.A., and continue to repeat the doses at intervals of

one, two, or three hours, until several doses have been given, when the intervals between the doses may be increased to two or three hours. This continue so long as the animal improves. It may alone suffice. Later, when the disease is fully formed, with well developed swellings in different parts, dumpish or dull, urine scanty or suppressed, or wanting, give SPECIFIC H.H. in alternation with SPECIFIC A.A. at intervals of two or three hours between doses. This continue until the urine is free, after which, and especially if there is great and increasing loss of strength and prostration, substitute the SPECIFIC I.I. for the H.H., and thus continue the A.A. and the I.I. at the intervals above mentioned, a dose say every three hours. The SPECIFIC I.I. is required for the depressed vitality, septic or typhoid condition, and these two SPECIFICS A.A. and I.I. should be continued, prolonging the intervals between doses, as the patient improves. For convalescence, weakness, or any remaining difficulty, give SPECIFIC J.K. daily. Abundant pure water, good nutritious food, mashes, or softened grain, and pure air, protection from the sun and rain, are absolutely essential to success. If a herd or stock among which the disease is spreading can be removed to higher, purer surroundings with good water, it is better to do so. All animals dying from the disease should be burned at once, and the remains covered with lime, chloride of lime, or wood ashes, to disinfect and prevent the contagion being carried by flies to other stock, or other means.

PART II.

DISEASES OF CATTLE.

CHAPTER I.

GENERAL DISEASES.

Fever, Quarter Evil, Joint Murrain.

This disease, which is quite common, is known in different localities by various terms, as *black quarter*, *quarter evil*, *joint murrain*, etc.

Symptoms.—There are few premonitory symptoms. Often without any, or with slight indications of previous illness, the animal is found ill; the neck extended; the head brought as far as she can effect it into a horizontal position; the eyes protruded and red; the muzzle dry; the nostrils expanded; the breath hot; the root of the horns considerably so; the mouth partly open; the tongue enlarged, or apparently so; the pulse full, hard, and from 65 to 70; the breathing quickened and laborious; the flanks heaving violently, and the animal moaning in a low, peculiar way.

Sometimes the animal is in full possession of her senses, but generally there is a degree of unconsciousness; she will stand for an hour or more without the slightest change of posture; can scarcely be induced to move, or when compelled to do so, staggers, and the staggering is principally referable to

the hind quarters: rumination has ceased, and the appetite is quite gone. After a time, the animal becomes more uneasy, yet it is oftener a change of position to ease the limb than a pawing; at length the animal lies down, or rather drops, gets up almost immediately, is soon down again, and debility rapidly increasing, she continues prostrate, sometimes comatose, and at others making fruitless attempts to rise. The symptoms rapidly increase, there is no intermission, and the animal dies in from twelve to twenty-four hours.

In the majority of cases, the animal seems to rally a little, and symptoms appear which give the local names of the disease. The beast attempts to get up; after some efforts it may succeed, but is sadly lame in one or both the hind quarters. If not yet fallen, she is suddenly lame, so lame as scarcely to move, hence she has "*joint murrain*" or "*quarter evil.*"

Tenderness of the loins and back is one of the earliest symptoms and most to be dreaded. The animal will not bear even the slightest pressure on these parts. The case is worse if to this is added swellings about the shoulders, back and loins, with a peculiar crackling noise, as if from deficient synovia or joint-oil. Worse than even this is the sudden appearance of hard, scurfy patches of what seems to be dead skin. It is a dry gangrene, and the commencement of a process of sloughing, extensive and rapid, to an almost inconceivable degree. This forms the "*black quarter*," with all its fearful characteristics.

Ulcers first appear about the belly, the quarters and teats, but spread everywhere, and particularly about the muzzle and mouth. The tongue is blistered and ulcerated, and there is a discharge of sanious, offensive or bloody fluid from the nose or

mouth, or from both. The urine, previously high-colored, now becomes darker and bloody; the dung is streaked with blood, and all the excretions are excessively fetid. In this state the animal may remain some days, until it dies, a "mass of putridity."

TREATMENT.—Give fifteen or twenty drops of the SPECIFIC A.A., for FEVER, every two hours, for the first twelve hours. This is more especially indicated for the fever, lameness, congestion, etc.

After the first twelve hours, unless there is decided improvement, give alternately the SPECIFIC I.I., for ULCERS, ROT, etc., in doses of twenty drops, alternately with that for FEVER, every two or three hours, according to the urgency of the case. Continue this treatment without intermission or variation, prolonging the intervals between the doses as the animal improves.

Vesicular Epizootic.

This is an epidemic disease, which has at times invaded various sections of the country under somewhat varying forms, sometimes a lingering, and at others a rapidly fatal disease.

The symptoms are as follows: The premonitory indications are: dullness; impaired appetite; staring and harsh coat; the muzzle, ears, horns, etc., are cold at one time and hot at another; the beast shakes all over and feels uneasy, and does not associate with the other cows; the cud is not chewed as in health. Then the milk is found to be lessened, yellowish and thick; the bag is swollen, hot, and painful when touched; the back is arched, and she seems uneasy on her feet, and unwilling to move. This attracts attention to the feet, and they are found hot and painful; the hoof at the top is swelled, and a discharge runs from the heels; the

eyes look dim, and tears run from them; the inside of the nose and whites of the eyes look red; the mouth is dry, and the membrane covering has little red spots in it, which rise into blisters upon it, over the whole mouth; they contain a fluid, and increase in size, finally burst, and a sore is left behind, which becomes a deep rugged ulcer. These blisters are also found upon the bag and about the hoofs, especially of the hind legs; the hoofs may even fall off, the bones become diseased, and other grave results ensue. The appetite becomes more and more impaired; there is great weakness, wasting, discharge of stringy, bloody fluid from the mouth; offensive matter running from the nostrils; swollen face; bad breath; quick, grunting breathing; small, weak, quick pulse; dropsy of the belly and legs; purging, and death.

The causes, like those of all epidemic diseases, are involved in some mystery, yet it is indisputable that the disease, having occurred in a place or neighborhood, other cattle in the vicinity are more liable to be attacked, and those most so which are in contact or on the same place, and especially those that are poorly kept and housed, or at times exposed to bad weather, bad food, or other depressing influences. This rule applies to all epidemic diseases, whatever may be their particular form or manifestation.

TREATMENT.—To prevent the disease, if prevailing in the place or in the neighborhood, give fifteen drops of the SPECIFIC for DISTEMPER, C.C., every night. This will tend to protect the system, or at least modify and diminish the force of an attack, should it come on.

To cure the disease: Give fifteen drops of the SPECIFIC for DISTEMPER, C.C., every three hours,

during the earlier stages of the disease, continuing so long as there is an improvement.

Should ulcerations have occurred, or blisters have formed on the mouth, bag, legs, etc., it will be better to alternate the SPECIFIC for ULCERS, I.I., with that for DISTEMPER, C.C., at intervals of three or four hours, during the height of the disease, and at longer intervals as the improvement progresses. The persevering use of these Specifics will save most cases.

Foot and Mouth Disease—Eczema Epizootica—Epizootic Aphthæ—Vesicular Epizootic.

DEFINITION.—An acute, contagious fever, characterized by the formation of vesicles and ulcers, chiefly about the mouth and hoofs, etc. The eruptions appear on the mucous membrane of the mouth (*stomatitis aphthosa*), on the coronary border and in the cleft of the hoofs, and not unfrequently as a pustular exanthema on the udder. The disorder chiefly prevails among cattle and sheep, but, under favoring circumstances, also attacks other domestic quadrupeds, and even man.

CAUSES.—It appears as an epidemic, and spreads exclusively by contagion. The precise nature of the materies morbi is unknown, but it is chiefly limited to the contents of the vesicles, the secretion of the ulcers, the saliva, the blood and the natural secretions and excretions of the diseased animal; and these convey the disease. The predisposing causes are exposure to cold, wet, currents of cold air, poor fodder, want of cleanliness and good housing; and anything that tends to lower the constitutional vitality. The activity of the virus is preserved for many months. The poison may be conveyed by the

clothes of herdsmen and other persons, by manure, tools, fodder, by grass and ground previously trodden by diseased animals, and milk to sucking calves, indeed by almost anything. It finds its way into the system in various ways, not depending on any wound for admission. The communication to man is by drinking the milk of diseased cows. A second attack is rare.

SYMPTOMS.—After a period of incubation, lasting from three to six days, the animal is seized with a shivering fit, and appears dull and stupified. A vesicular eruption soon appears on the mouth, the hoofs, and the teats. Sucking calves have a similar eruption on the fauces and pharynx, with irritation of the whole alimentary canal, attended with inability to suck, and exhausting diarrhea. The eyes are then observed to be dim, watery, congested; the muzzle, ears and horns alternately hot and cold; shivering ensues; rumination is diminished; the milk is less in quantity, yellower and thicker than usual, and much deteriorated in quality; the bag swollen, tender, hot; the back arched; the coat staring and harsh; the pulse somewhat accelerated; the temperature moderately elevated, reaching 102°, or even 104°; the eruption in the mouth is first seen on the inner surface of the upper lip, the edge of the upper jaw where there are no teeth, on the tip and edges of the tongue, and is indicated by salivation, by pain and loss of power in taking and eating food. The vesicles occur on the mucous membrane, singly or in patches, first as little red spots, then as whitish-yellow, slightly turbid blisters, about the size of a bean, at first transparent, but subsequently filled with a puriform fluid. These vesicles burst in about eighteen hours, discharge their fluid, leaving behind shallow ulcers, which often become confluent,

and then form deep and ragged ulcers. The lips, cheeks, tongue, and sometimes the Schneiderian membrane, are affected. The eruption on the feet is first seen around the coronet and in the interdigital space, especially of the hind legs; and the resulting vesicles burst quickly, because of the animal's movements. The animal evidently suffers intense pain, is lame or unable to stand, and moves reluctantly or cautiously; the hoofs swell; the vascular secreting membranes become inflamed; the hoofs are cast; the bones may become diseased, and serious mischief may ensue. The eruption on the udder turns to vesicles, as in the mouth, and, when the fluid dries or escapes, thin scales are formed. The teats are swollen and sore. In exceptional cases, a vesicular eruption appears on the muzzle, the mucous membrane of the nostrils, the conjunctivae of the eyes, and the mucous membrane of the vagina.

In favorable cases, the fever subsides about the fourth day, the eruption declines, the appetite returns, and in seven to fourteen days the animal recovers. But complications are not uncommon. And in unfavorable cases the fever is high, the ulceration increases, the animal suffers from exhaustion, wasting, discharge of stringy, bloody mucous from the mouth, and of offensive matter from the nostrils; the face is swollen, the breath foul, the respiration rapid and grunting; the pulse small, weak, rapid; the blood becomes impure; the belly and legs œdematous; the hoofs slough off; diarrhea supervenes, and death follows about the ninth or tenth day. An aggravation may occur in milch cows by the bursting of the vesicles when the teat is grasped in milking, for the fluid escapes, the sore bleeds and the ulcer spreads; and though the sore

be scabbed over between the milking times, the scab is then again pulled off. The consequence is that the cow, feeling intense pain and irritation, kicks, resents the milking, holds back the milk, and thus prevents the "stripping" of the udder. The effect of this may be an attack of inflammation of the udder, which may prove fatal, or may be followed by induration and atrophy of the udder. Or abscesses may form in the udder, and sometimes large portions of it slough away, rendering the cow comparatively useless for milking purposes. Abortion is not uncommon.

Prognosis.—This is favorable. The course of the disease is usually mild. Its duration from twelve to fourteen days. In most cases it terminates in recovery; only in exceptional cases, when the animal has some chronic disorder, does death ensue.

Calves, however, generally die, suffering from Gastro-Enteritis, caused by taking the infected milk. Treatment same as on page 218.

Rheumatism.

This disease is almost invariably the consequence of cold and wet, or chill after over-exertion. The symptoms are as follows:

Dullness; loss of spirits; disinclination to move, and painful stiffness of the back or joints when moving; loss of appetite; pain in the back, manifested by the animal flinching when pressed upon; the joints, one or more, become affected, and the animal prefers to lie down, and cannot move without great pain and difficulty; the joints, or one or more of them, become swelled, and are also exceedingly hot and tender to the touch. In some cases, there is considerable heat and fever, in others it is but slight. The complaint is quite liable to return from

exposure, changes of weather, or even the wind blowing from a different quarter. The disease not unfrequently changes from one joint or limb to another.

TREATMENT.—The SPECIFIC for RHEUMATISM, B.B., will cure all the usual forms of this disease, giving twenty drops three or four times per day, in severe cases, and morning and night in the mild ones.

When the disease is ushered in or attended with considerable heat and fever, either during its continuance, or from the first, the SPECIFIC for FEVER. A.A., in doses of twenty drops, should be alternated with that for RHEUMATISM, B.B., at the intervals mentioned above. The use of these two remedies will control every form of this disease.

Lumbago.

This is merely a form of Rheumatism, locating itself upon the muscles of the loins. It may be mistaken for some other or different disease, and hence its symptoms should be known.

SYMPTOMS.—After some exposure, especially to cold or wet, or a draft of air, the cow will suddenly become lame in one leg, without other signs to explain the nature of the attack. Another leg may then be affected, while the first one seems better or quite well. Some pain and heat may be discovered in one of the joints; and then the muscles of the back show more clearly the location of the disease; or from the first the disease may be referable to this point; the animal yields and flinches when they are pressed upon, in consequence of the pain; the beast is not able to walk, or does so very stiffly and awkwardly, in consequence of increased pain from movement. These attacks may continue for a time, disappear and return again, in consequence of new exposure.

TREATMENT.—The SPECIFIC for RHEUMATISM, B.B., should be given, a dose of twenty drops, three times per day, which follow with SPECIFIC J.K.

Ophthalmia, Inflammation of the Eye.

Diseased and inflamed eyes in cattle may sometimes occur as a result of congestion, or from inflammation or a cold, but in general from an injury, the result of a blow of a whip, or stick, or from dirt or hay seed, or some similar substance irritating the eye.

SYMPTOMS.—The eyelids are swelled and closed; tears flow in abundance; the eye shrinks from the light when the lids are opened; the white of the eye or conjunctiva is reddish or covered with red veins; the haw is also red and swollen; the eye itself is clouded and covered with a film.

TREATMENT.—Examine the eye for dirt, hay-seed, or other substances, and when found remove them. Bathe the eye with THE MARVEL, diluted half and half with soft water, morning and night, until the more violent symptoms are removed. Give, internally, fifteen drops of the SPECIFIC for INFLAMMATION, A.A., each morning and night.

In long-standing cases, a dose of the SPECIFIC for ULCERS, I.I., repeated every few nights, will be found of great value, while the A.A. is given each morning.

Fits, Convulsions, Epilepsy.

The symptoms of fits are pretty well known. Without any or very trifling warning, the beast staggers and falls suddenly to the ground; he often bellows in the most alarming manner; then every part of the body is violently convulsed; the tail is lashed; the teeth are ground; the mouth closed, and jaws

fastened together; the breathing is quick and attended with heaving at the flanks; frothy slaver dribbles from the mouth, and the urine and dung are discharged involuntarily. In a few moments the convulsions become less severe, then cease, and the animal soon seems as well as if nothing had happened.

Fits are most apt to attack young, vigorous, well-fed cattle, or those that have been much exposed to the direct action of the sun.

TREATMENT.—Little or nothing can be done during an attack; but as one is likely to be followed by another, the medicine should be given as soon as the attack is well over.

Give, immediately after the attack, twenty drops of the SPECIFIC for CONVULSIONS, A.A., and repeat the remedy morning and night for some days.

If an animal is subject to these fits (epilepsy), returning at intervals of a few days or weeks, give, alternately, at intervals of six or eight days, twenty drops of the SPECIFIC for CONVULSIONS, A.A., and that for PARALYSIS, J.K., and continue these for some time.

Foul in the Foot, Foot-rot.

Foreign bodies, such as gravel, dirt. stones, etc., especially in moist, low or marshy places, get into the cleft of the foot, and produce lameness and the following symptoms:

There is lameness and swelling of the pasterns, and heat, with evident pain; matter then forms, and unless it is let out, it will extend in all directions under the foot, and appear at the coronet or top of the hoof; and from this long, narrow ulcers remain, and proud flesh springs up from the diseased places.

TREATMENT.—Examine the foot carefully, and remove all foreign substances, dirt, etc., that may be found; then foment the foot with hot water night and morning, and apply the VET. CURE OIL, and wrap it up with a cloth to keep it clean; the hoof should be pared, and those parts of it cut away that may interfere with the escape of matter; all dead hoof must be removed. The sore must be examined, and if dark and unhealthy the OIL and covering must be renewed from time to time until the dark matter sloughs off. After the ulcer looks clean, simply apply the VET. CURE OIL, over which a cloth must be kept wrapped around to prevent dirt lodging in the wound and causing fresh irritation. These may be renewed, if needful, until entire recovery.

Give also the SPECIFIC for ULCERS, I.I,, each night, a dose of twenty drops.

Mange.

This disease consists of a violent itching and irritation of the surface, and is liable to attack all badly-kept domestic animals. It may be caused by overfeeding, or want of wholesome, nutritious food; either extreme may induce it. Thus suddenly changing a cow from a very poor to a rich pasture may induce it, or it may be communicated from one cow to another.

The symptoms are: great itchiness, so that the animal is continually rubbing herself; the hair falls off, scabs or sores remain in patches on the back and tail especially; the cow becomes thin; appetite fails; her milk is reduced in quantity and quality, and she becomes a miserable object.

TREATMENT.—Cleanse the skin by means of a brush, which must not be used for another animal

without having been thoroughly washed and cleansed, otherwise it will communicate the disease; afterwards go over again with warm water and soft soap, and carefully dry the surface. Give, night and morning, twenty drops of the SPECIFIC for ERUPTIONS, I.I.

Should the sore spots not readily heal, apply the HUMPHREYS' VETERINARY CURE OIL.

Hidebound.

This condition, in which the skin seems firm, hard and bound to the parts beneath, is due to some morbid condition of the system rather than to a disease of the skin itself. There is most frequently some derangement of the stomach, or some old standing organic disease. Remove these, and the disease disappears, and the hide becomes soft and loose.

TREATMENT.—The SPECIFIC for INDIGESTION, ILL CONDITION, J.K., giving twenty drops morning and night, will generally remove the difficulty.

If it fails after a fair trial, give the SPECIFIC for INDIGESTION, J.K., each night, and that for ERUPTION, I.I., each morning, twenty drops.

Splenic Fever—Anthrax—Blood-Striking—Carbuncle.

This disease is a form of Anthrax, and has received the name "Splenic Fever" from enlargement of the spleen, which is a constant pathological feature; the enlargement being consequent on infiltration of the connective tissue. It was thought to be a local affection, and hence was called by the Germans "Milzbrand"; but the French have recognized its true character as a blood disease, and termed it

"*maladie de sang.*" It is only within the last ten years that its independent nature has been recognized in this country. It chiefly attacks cattle and sheep, less frequently horses. It is also transmissible to other animals, and even to man, in whom it is known as *Mycosis intestinalis.*

Splenic Fever is an acute, infectious disease, which usually breaks out in an epizootic or enzootic manner. The infectious material consists of a vegetable parasite, which is produced in the animals attacked and developed under certain favoring local circumstances. There seems to be no doubt that the development to some extent depends on geological peculiarities. It is chiefly found on soils rich in decaying vegetable matter, and holding an excess of moisture; on peat-moors; near dried-up lakes, towns, and watercourses; on newly-turned land, where pastures are luxuriant; in malarial districts. In hot seasons it breaks out on lands imperfectly drained; in wet seasons, on lands that are rich and stiff.

Causes.—Contagion. It may be communicated by any means which involves the transference of a portion of the blood of a diseased animal to the living tissue of an animal previously healthy. It is not known that it can be propagated in any other way, for animals kept in the closest proximity to diseased ones, and placed under the most favorable conditions for infection through the air, are not infected. But whatever can convey the blood, whether liquid or dried, can convey the disease. It appears too that the power of transmission, thus existing in the blood, is in some conditions very ephemeral, lasting only four or five days; while in other conditions it is remarkably persistent, reappearing after a long interval. For the reception

of the disease, individual susceptibility is necessary; herbivorous animals are more susceptible than omnivorous animals; these more so than carnivora. Well-nourished animals are most liable to attack, especially those that, having been in poor condition, are put on rich diet, and those that are fed on rich food without sufficient exercise, such as stall-fed cattle and folded sheep. Animals recently introduced from stables and districts free from disease into those that are infected, are more liable to take it than those that have been for some time in such stables and districts. Other infectious diseases afford no immunity. Animals of all ages and both sexes are attacked. As a rule, its development is limited to hot seasons and the summer months.

The extension of the disease in this country during the last few years is unquestionable.

Symptoms.—The most striking feature of the disease is its extremely rapid progress. In the most rapid cases, sometimes referred to as "apoplectic," the animal drops as if it had received a blow, and goes into convulsions; the pulse and respiration are accelerated, cyanosis and dyspnœa ensue, and often the fatal termination is reached in a few minutes or a few hours. But the disease is usually prolonged a day or two. An animal which, perhaps, during the previous day, has declined food and shown signs of general disturbance, begins to shudder and to have twitches of the muscles of the back, and soon after becomes weak and listless. The surface of the body then becomes cold, the visible mucous membranes purple; there is increased thirst; the secretion of milk is diminished or stopped. In the meantime the respiration becomes frequent, and often difficult. the temperature of the body rises to 106° or 107° (alternating from hot to cold), and the

pulse is nearly doubled. These symptoms often occur in paroxysms, and during the intermission the animal may appear to be in perfect health. Soon clonic spasms, chiefly affecting the muscles of the back and loins, usher in the fatal collapse, of which the progress is marked by complete loss of motive power in the trunk and extremities, violent convulsions, opisthotonos, peculiar convulsive contractions of the muscles of the eyes, so that only the whites are visible, apparent asphyxia, diminished temperature, mucous and bloody evacuations from the mouth, nose and rectum.

Among cattle, Carbuncles are rarely met with, so that, although one of the names by which the disease is most frequently designated is derived from them, they are by no means diagnostic of it. In the horse, the disease presents similar general characteristics, but is much less acute. But in this animal there is an infiltration of the sub-cutaneous tissues, giving rise to localized swellings, which are termed Carbuncles; especially in the slower and less acute cases. They generally occupy certain parts (by preference the head, neck, extremities, and the under portions of the breast and belly), are conical in shape, and hard to the touch, and are often followed by sloughing of the tissue and enormous ulcers.

Pathology.—Rigor mortis is almost constantly absent. Of the phenomena revealed by post-mortem examination, those connected with the blood, the circulatory and lymphatic systems are the most important. In the blood, the relative number of white corpuscles, except in the "apoplectic" cases, is very considerably increased; this is probably due to acute irritation and swelling of the lymphatic glands, and of the spleen, which occasion an excessive

production of lymph cells. In the horse, in consequence of the longer duration of the disease, this increase is so great that the blood in some cases becomes quite pale. The red corpuscles are generally of lessened consistence, and show a tendency to cohere in clusters. The blood does not coagulate; but both the liquor sanguinis and the corpuscles squeeze from the vessels into all the cavities of the lymphatic system, into the sub-cutaneous, sub-mucous, and sub-serous cellular tissues, and (when under the skin) form those localized swellings, which are called "Carbuncles." The spleen is regularly enlarged up to two, four or five times its natural size; sometimes it is ruptured. In acute cases it is soft and soaked with blood, its capsule often appearing to be distended; but in more protracted cases, it is firm. The enlargement appears to be due not merely to hyperæmia, but also to the multiplication of the elements of which the organ is composed. In the digestive canal generally, but particularly in the abomasum and duodenum, there is extreme congestion of the surface and infiltration of the mucosa. In the ox, the whole of the intestines are involved; but in the horse the process is localized, forming the so-called carbuncular infiltrations of the mucous membrane at the pyloric end of the stomach and the adjoining part of the duodenum. The kidneys are dark and ecchymosed; the bladder distended, and its membrane tinged with blood; the pericardium not unfrequently contains a considerable portion of bloody serum. The blood itself, on microscopic examination, is seen to contain characteristic reed-like bodies; they are straight, rarely bent, cylindrical, of pale appearance, never branched, motionless, generally 0.007 to 0.012 metre long, and of inappreciable breadth; they are concerned in the

morbid process, how is unexplained, but they appear and disappear with it, and disappear when putrefaction commences.

Diagnosis.—In occasional cases this is very difficult, if not quite impossible. Even microscopic examination of the blood of the living animal affords no certainty, for the characteristic rods are not always present; though when they are present there is no question about the disease. Inoculation of other animals may aid diagnosis. A post-mortem examination sets the question at rest.

Prognosis.—This is very unfavorable; about seventy per cent. of cattle and horses attacked, die.

Treatment.—Specific A.A. is for all forms of this disease, the first and principal remedy; at first, give a dose every hour; only after a time, and when the fever seems less intense or of lower grade, the Specific I.I. may be given in alternation with the A.A., a dose, at intervals of two or three hours; first of A.A. and next of I.I., and so on. For a final cure, give the I.I. in alternation with J.K., a dose of each twice per day.

Nervous Fever.

This disorder is sometimes epidemic, and causes great ravages by contagion.

Symptoms.—Loss of appetite; dryness of the tongue, mouth and nose; dejection and debility; convulsions, sometimes violent spasms; the animal totters, falls as if struck with epilepsy; seldom leaves the litter, and refuses to drink. At first the alvine excretions are dry, afterwards soft; the food at length passes out undigested; the tongue is foul, and the mouth discharges abundance of foul saliva. The feverish symptoms are increased in the evening. Treatment, as for typhus fever.

Typhus Fever.

Causes.—It occurs frequently as the sequel of inflammatory fever, especially when adult beasts have been attacked. It is most prevalent in spring and autumn, especially on marshy lands subject to malaria; hence it is regarded as due to a peculiar miasma. But it is sometimes epidemic, and fatal to a great extent, sweeping away many valuable cattle. The secondary causes are want of water, bad fodder, foul stables, excess of work, injurious plants, stings of insects; long continued changes of heat and cold, great heat following long rain, are also predisposing conditions.

Symptoms.—The animal suddenly stops eating and ruminating; appears to be struck with stupor, and staggers; hangs its head, or lays it on the manger, or carries it upwards and from side to side; often moans; sometimes becomes mischievous. The eyes are fixed and watery, but not red; the horns, ears and nose are hot and cold alternately in a few minutes; sometimes cold only continues throughout the course of the disorder. Bloody mucous is discharged from the nose, and viscid saliva from the mouth. In some cases the urine and dung are suppressed; or, if they be voided, the former is strong and high-colored, the latter in small round lumps. The passage of mucous and blood indicates a change for better or for worse; sometimes watery diarrhea or bloody and extremely fœtid evacuations have been followed by cure, sometimes by a fatal issue. The coat is generally dull, staring and rough; the skin sometimes adheres to the underlying tissue, at other times is separated from it by air, so that in passing the hand along the back there is a sense of crepitation. After danger is passed, in many cases carbunculous tumors appear on the limbs, back,

abdomen, udder and sheath, and ulcerate. *Cows give little or no milk*, the secretion ceasing at the commencement of the disease.

Dangers.—The disease runs its course in four and twenty hours, seldom lasts three or four days; often kills suddenly. Beasts that appear healthy in the evening are found dead in the morning.

There is danger of *relapse* after amendment or cure. This may occur at any time during twenty-four hours after apparent cure. The animal should therefore be watched, and medicine still be given.

Sequelæ may remain, though they are not fatal. Such as indolent tumors; pustules containing fluid forming small scabs; induration or swelling of the several glands and teats; suppression, diminution or change in the milk; hardness and scantiness of evacuations; emphysema under the skin, causing crepitation when the hand is passed over it; deficiency of appetite and rumination.

Treatment.—Specifics A.A. and I.I. are the proper remedies, and should be given a dose once in three hours at first, and later four times per day.

Rinderpest—Cattle Plague—Steppe Disease—Murrain.

Definition.—A highly contagious fever, characterized by specific intestinal lesions, similar to those of Enteric Fever in man.

Causes.—It originates in the Asian or Russian steppes, among the herds grazing there; is slow in its progress in the localities where it arises, and is not attended with great fatality; but as it is transmitted, and travels westward, it becomes most virulent and fatal among the herds of Central and Western Europe.

SYMPTOMS.—The period of incubation is usually about five days, though violent symptoms may occur in twenty-four hours. Rarely the invasive period extends to nine or ten days.

First stage.—Languor, dullness, heavy movement, tottering gait; in some cases the animal bellows, beats the ground with its hoofs, is unruly and vicious. The appetite is rather increased than otherwise, but is irregular; and after feeding, the animal appears indifferent to what is going on around, and hangs its head and ears; rumination is also slow and irregular. When the animal rises from the ground it does not stretch itself, as it usually does in health, but arches the back instead of sinking it, yawns, and draws its legs together under the body. The eyes are lustrous, blood-shot; eyelids swollen, and soon encrusted with dry secretions. Tremulous movements may be observed in the skin, and the hair is rough in places. A short, husky cough occurs at intervals after the fourth or fifth day. The animal licks its chops less than usual; it can bear no strong pressure with the hand, and if the loins be squeezed, the back drops. The dry excrements and highly-colored urine are scanty, and voided with difficulty. This stage lasts about three days.

Second stage.—About the eighth day after infection, the plague is unquestionable and the symptoms increase in severity. We have aguish symptoms, twitchings, bristling of the hair, trembling of the limbs, especially the hind quarters; vigorous cattle are violent; feeble and aged beasts grind their teeth and shake their heads; the ears hang, and are sometimes hot, sometimes cold, as also are the roots of the horns; the chops and muzzle are dry; the interior of the mouth is of a light red, and steaming hot; the

gums are swollen and spongy, and sometimes spotted with deep red; the sensitiveness of the loins increase; the skin is very tense; the pulse is weak, and indistinct at the jaw, but accelerated to 90 or 100; there is a single, violent, hollow, convulsive cough; the rumination is incomplete, the dung is scanty, dark, sometimes almost black, parched and deeply furrowed, and is frequently voided; the urine is highly colored; the tail is extended horizontally, or strikes the sides, the animal often looking round at its hind quarters; air bladders can often be felt under the skin, on the back and loins; the fever is aggravated in the evening, lessened in the morning; the secretion of milk is stopped, and the udder is flabby and shrivelled up.

Third stage.—This commences about the tenth day. The sadness, debility and emaciation are extreme; the eyes run, then the tears thicken and form a crust about the eye; the discharge from the nose is white, viscous, cloudy, glandery; the tongue flaccid; the breath offensive, even putrid; rumination ceases; the alvine secretions are watery and forcibly ejected; or, if there be no diarrhea, the hind part of the body is greatly swollen.

Fourth stage.—About the fourteenth day, the secretions from eyes, nose and mouth are thick, grey, corrosive and putrid; the skin of the mouth and gums is dried up; the skin of the body peels off; the alvine secretions, serous and bloody, is involuntary and almost constant; the head of the poor creature is continually turned to its hind quarters; the extremities are cold; the breathing accelerated; the alæ nasi move spasmodically; there is general stupor and loss of sensibility; cows abort; and about the seventeenth day the animal dies. In favorable cases, the symptoms diminish early, the

diarrhea is not severe, a pustular eruption breaks out over the body, or there is desquamation of the cuticle; but the recovery is slow, and may be protracted for weeks.

TREATMENT.—Specifics A.A. and I.I. are the proper medicines, and should be given in alternation, as for other fevers, a dose once in two or three hours, in alternation, and so continued all through the disease.

Lump Jaw, Big Jaw, Actinomycosis.

This is a somewhat prevalent disease among the cattle of our far western plains, and the victims are not unfrequently found in the stock yards of our western cities, in the pens devoted to slaughter. Its origin is not ascertained. It consists of a peculiar metamorphosis, or change of tissue (whence its name) in the soft parts, and in the bones of the face or jaw. The substance of the lumps consist of tufts, which radiate from a centre, are extremely hard, of a dirty white or pinkish color, often the size of a pin's head. It usually affects the soft parts, tongue, cheeks, face and throat, and later the bones of the upper and lower jaw. The affected jaw swells and becomes a large rounded mass, which finally becomes a running sore. When the tongue is attacked it appears as a hard, rounded swelling, giving rise to the name "wooden tongue." At times the entire face becomes involved, lips and nostrils become firm, hard, almost immovable, and the skin and mucous membrane so swollen as to render breathing difficult, or snuffling. There are also hard roundish swellings around the throat, principally affecting the glands. There may be cough and dribbling of slime from the extension of the disease to the air passages and lungs.

TREATMENT.—Badly affected cattle should be destroyed, and the carcas given to the rendering vats. But young, and only slightly affected cattle should have a chance, and may be cured by giving them good green feed, mostly soft, not putting too hard a strain upon the diseased jaw, and giving them morning and night say for two weeks, and later once per day, the usual dose of Special SPECIFIC for LUMP JAW, L.J. To be had on application to this Co., the same form as other VETERINARY SPECIFICS.

Continue the use of this SPECIFIC faithfully, remembering that this is a constitutional disease involving material and deep-seated changes of tissue and a restorative to health and soundness, though possibly it will require time and patience. Slight cases easily arrested.

CHAPTER II.

DISEASES OF THE ORGANS OF RESPIRATION.

Choryza, or Cold in the Head.

THIS very common affection consists of an irritation, and sometimes inflammation of the lining membrane of the nose. It is usually caused by exposure to cold or wet, or too sudden changes of weather; it is sometimes the commencement of catarrh, and is most frequent during winter and early spring; or it may arise from the irritation of dust inhaled during a long journey.

SYMPTOMS.—In some cases of cold, the irritation is confined to the nose alone, and is then known as Choryza. It is manifested by a discharge from the nose, first thin and watery, afterward becoming thicker, like matter, and corrosive, fretting the skin.

If the disease extends along the air passages, bronchitis, or even inflammation of the lungs, results, manifested by the cough, fever and difficulty of breathing peculiar to these affections.

TREATMENT.—For mere choryza or cold in the head, give the SPECIFIC for DISTEMPER, C.C., a dose of twenty drops, morning and night.

If symptoms of Fever, Bronchitis, or Pneumonia should be present, interpose a few doses of the FEVER SPECIFIC, A.A., twenty drops, repeated every three or four hours, which will promptly relieve. Consult also what is said on Bronchitis or Pneumonia.

Hoose, Catarrh, or Common Cold

Differs from the Choryza, as the irritation involves the lining membrane of the entire air passages. It is most frequent in the changeable weather of spring and fall, when cattle are exposed to frequent alternations of temperature, or when too many cows are crowded together in a stable, rendering the air hot and impure. Young beasts and cows after calving are especially subject to hoose.

SYMPTOMS.—Dry nose, frequent cough, discharge from the nostrils, stiffness of the limbs, disinclination to move, purging, cold skin, and then hot; imperfect chewing of the cud, failing of milk, watery eyes, quick pulse and breathing. It is very frequent and very fatal in calves, and requires to be attended to promptly in all cases, or it will end in some more dangerous disease.

TREATMENT.—During the earlier stage, with fever, heat, quick pulse and breathing, give the FEVER SPECIFIC, A.A., a dose of twenty drops, four times per day.

Should cough and irritation remain, or not yield promptly to the FEVER SPECIFIC, give the SPECIFIC E.E., for COUGH, the same dose, repeated four times daily; or if fever yet continues, give the two Specifics in alternation, at intervals of three hours.

For calves, give one-third or half as much as for grown cattle, according to age or size.

Sore Throat or Pharyngitis.

The disease consists of inflammation, with consequent swelling and soreness of the top of the gullet or passage between the mouth and stomach. It arises from the same causes which produce colds, and sometimes assumes an epidemic and very fatal

character, especially when the spring or fall is very cold and wet, and the animals graze on damp, marshy grounds. It is usually accompanied with catarrh.

SYMPTOMS.—Difficulty of swallowing, so that solid food is partially chewed and then dropped from the mouth; fluids are gulped down, or partly return through the nostrils; or all food may be refused in consequence of the severe pain attending swallowing; the cud is not chewed; the throat and glands of the neck are swelled, hot and painful; the cough is frequent, hoarse, and indicates pain; the breathing becomes very difficult and labored, and the pulse full and quick.

TREATMENT.—Give twenty drops of the SPECIFIC for INFLAMMATION, A.A., every three or four hours, until three doses have been given, then begin with the SPECIFIC C.C., for QUINSY or SORE THROAT, and give every three hours of the C.C., in alternation with the A.A. As the animal improves and the fever and heat abate, the A.A. may be discontinued, and the C.C. be used alone, at intervals of four or six hours, to complete the cure.

In all febrile diseases of cattle, it is of the utmost importance to house them in a *warm, dry, comfortable stable*, free from exposure, dampness, or cold drafts of air, especially in cold or moist weather.

Cough.

Cough in the cow is rarely or never a disease of itself, but merely a symptom or attendant of some disease of the respiratory organs, such as Catarrh, Bronchitis, Pleurisy or Pneumonia, of which it is merely the indication. Its symptomatic importance is such that it always deserves attention, and its cause should at once be carefully investigated. In some case very grave alterations may be going on in

the lungs, which will escape notice if attention be not directed to it by means of the cough. Examine the animal carefully, ascertain the state of her pulse, breathing, appetite, secretion of milk, etc., and direct treatment for such disease as is found to be present.

However, in the absence of any special indications, the SPECIFIC for COUGH, E.E., should be given, a dose of twenty drops morning and night, which will generally relieve, and will not be out of place in any case.

Bronchitis, or Inflammation of the Bronchial Tubes.

This disease is usually the result of exposure to cold and wet, or sudden changes of temperature; it is almost always preceded by a common cold, which has been neglected or overlooked.

SYMPTOMS.—Cough, which becomes by degrees more painful, frequent and husky; the countenance becomes anxious and distressed; the breathing is quick, heaving and obstructed, in consequence of tough, tenacious phlegm; unwillingness to move; the breath is hot; the cough is increased by moving about, occurs in fits, and is wheezing in character; no food is eaten; the animal wastes; skin becomes dry, and is bound to the ribs; the coat stares and looks unthrifty. The animal may die from extension of the disease to the substance of the lungs, as in "lung disease."

TREATMENT.—The earlier stages of this disease, or catarrh, should be treated at once, as directed under that head. Then a dose or two of the SPECIFIC for that disease removes all danger.

Remove the animal to a warm but well-ventilated stable, and feed on warm mashes and gruel.

Give first, at intervals of two hours, two or three doses of the SPECIFIC for FEVER, A.A., twenty drops at a dose. This will allay the heat and fever to some extent. Then alternate, at intervals of three hours, the SPECIFIC for COUGH, E.E., with that for FEVER, A.A., the same doses, and continue this treatment until restored, only that the medicine need not be given so frequently after improvement has progressed.

Pleurisy.

This disease consists of an inflammation of the delicate membrane which lines the chest, and also is reflected over or covers the lungs.

It is caused most frequently by exposure to cold, or from the extension of catarrh. Pleurisy rarely exists alone, but is almost invariably complicated with bronchitis or pneumonia, or both.

SYMPTOMS.—The disease generally begins in the same manner as pneumonia, with dullness, loss of appetite, etc. The cough is attended with pain, and seems to be cut short, as if the animal tried to stop it; the breathing is short, seemingly cut off and evidently painful during the passage of the air into the lungs, and is attended with a grunt during its expiration; the sides are painful when pressed upon; the skin, at the angles of the mouth, is wrinkled; the shoulders and upper part of the chest are in a constant quiver; the head is stretched out; the eyes are unusually bright; the tongue hangs out of the mouth, from which frothy slaver is continually flowing. The animal neither eats nor chews the cud; she gets weaker and thinner every day, and all the symptoms become more and more severe until death ensues, often preceded by excessive purging.

TREATMENT.—Give at first the FEVER SPECIFIC, A.A., a dose of twenty drops, every two hours, and continue this the first day, and night if the case is severe.

Then alternate the SPECIFIC for INFLAMED LUNGS, E.E., with that for FEVER, A.A., at intervals of two, three or four hours, until the animal is cured.

FOOD AND STABLING.—In all serious diseases of the air-passages, Bronchitis, Pleurisy, Pneumonia, etc., the animal should be placed in a dry, comfortable stable, not too close, and her food should consist of bran-mashes, boiled carrots or turnips, meal-gruel and hay tea. Good old hay may be given *sparingly;* straw and chaff not at all. When the appetite is returning, great care must be taken not to give too much food at once, for if the stomach is overloaded or crammed, disease is almost sure to return, and the animal to die in consequence. *Give but very sparingly of food* until the stomach has fully regained its former power of digestion.

Pneumonia, or Inflammation of the Lungs.

This is an inflammation of the substance of the lungs, or lights, and is rarely unaccompanied with pleurisy or bronchitis. It is usually brought on by exposure to cold or sudden changes of temperature, or from the extension of a common cold.

The SYMPTOMS are as follows: The cow becomes dull, disinclined to move, and hangs her head; the muzzle is dry; the mouth hot; the cough frequent and dry; the coat rough and staring; the horns, ears and feet are hot at one time and cold at another; the breathing is quickened and attended with heaving of the flanks; the pulse is full and quick; appetite is gone, and chewing of the cud suspended.

The thirst is great, bowels bound and dung dark-colored; the spine is tender when pressed upon; the head projected forward and eyes staring; tears flow down the face; the teeth are ground; a discharge flows from the nose, at first clear and watery, afterwards red and containing some blood; the breathing becomes quicker, more difficult, and labored as the disease advances; the cough comes on in fits; the nostrils are widened, and play to their utmost limit; the body is covered with sweat; the pulse becomes weaker and increased in frequency, and these symptoms increase in violence and become gradually worse until the animal dies.

TREATMENT.—Give, the first twelve or twenty-four hours, the SPECIFIC for FEVER, A.A., a dose of twenty drops, every two hours.

After the fever and heat have been thus in a measure subdued, alternate the SPECIFIC for INFLAMED LUNGS, E.E., with that for FEVER, A.A., at intervals of three hours, giving, as before, twenty drops at a dose.

Continue this treatment steadily, except that, unless the case is very critical and urgent, the medicine need not to be kept up during the night, but a dose of the SPECIFIC E.E. may be given late in the night, and be permitted to act undisturbed until the morning; then go on as before.

For food and stabling, consult the article on Pleurisy, page 228.

Pleuro-Pneumonia, Pulmonary Murrain, Lung Disease.

This disease is now pretty well known in quite large portions of the United States, in its less violent or epizootic form. In Europe and the British Isles, it has been known for many years, and has at

times raged there, as well as here, as a most destructive and fatal epizootic, sweeping off a large portion of the stock on a farm, destroying almost every animal attacked. Old school treatment has met it and tried its resources upon it with much the same results as it has met the cholera or similar new diseases; and after having assiduously purged, violently blistered and setoned its patients, and tried all its arts upon them, has only seen the victims die a little quicker under this treatment than without any at all. So much so, that the belief obtains among very many cow-keepers that the disease is utterly incurable.

Within the past few years it has made its appearance in various sections of this country, said to have been imported from Holland, and has occasionally made sad ravages among the best imported stock of the vicinity. Within a few short months, it extended in various directions from its first locality, overleaping all precautionary measures essayed for its arrest and removal. The attempt to stay its progress by a sanitary cordon, and the indiscriminate slaughter of all animals tainted or suspected, though proper in themselves in reasonable limits, failed, as all such attempts have failed in regard to cholera and similar diseases. The English government have, however, succeeded in thus "stamping out" the disease for a time at least. Such invasions are best subdued when their true homeopathic treatment is understood, and the preventive measures suggested by the law of *similia* applied. That this will be the experience in regard to this new enemy we do not hesitate to affirm. According to all experience, it will prevail more or less extensively in this country, and hence it is well to be acquainted with its symptoms and treatment.

Homeopathy has been very successful in subduing this disease, and we are assured, from repeated trials, that all animals may be saved that are treated in the earlier stages, and even a fair proportion of the extreme cases.

CAUSES.—The causes of such forms of disease are involved in obscurity, but it is well known that certain circumstances strongly predispose to its development. These are: low, damp, badly ventilated, ill-drained stables; swampy, damp, boggy districts, in which there is a great decomposition of vegetable matter. It usually prevails at certain seasons of the year, and is most common in the late fall and early spring, or during damp, chilly weather. Some animals are more liable to attack than others; it is not so frequent and is more manageable in the open country than in extensive, close stables in large towns, where animals are crowded together, live an unnatural life, and are milked very dry in order to increase the daily yield. Many persons suppose it to arise from some atmospheric condition similar to that of cholera, and it is generally considered contagious, that is, communicated from diseased to healthy cows by contact or immediate contiguity.

SYMPTOMS.—These have been found to vary in different epidemics and seasons, nor does every animal attacked present all the symptoms of the entire disease. Yet, taking several animals together, the complete picture of the disease will be found, and each animal will also present sufficient characteristic symptoms to identify the malady. In the first stage, the attack has been known to vary, thus: the attack coming on with great violence, and running a rapid course in spite of all treatment; or, it may come on slowly and insidiously, the animal not

seeming very ill until her lungs are diseased beyond all hope of recovery; or, it may announce itself with violent purging, great weakness, and rapid loss of flesh.

The majority of cases, however, present the following symptoms: A short, dry, husky cough, which is heard only occasionally, and which is highly characteristic of the disease, and when once heard will rarely be mistaken again. The owner says, perhaps, he has heard this "hoose" for two or three days, but has paid no attention to it. On inquiry, we find the animal does not give so much milk as usual, and that it has a slightly yellowish tinge; the appetite is not much impaired, yet she is careless of her food, and does not lick her dish clean; when at rest, the breathing does not show any departure from its healthy play, but if the animal is moved about or walks some distance, it becomes more frequent, labored and difficult; the pulse is often healthy in character, although sometimes it is weak and slightly increased in frequency; the bowels may be confined, or purged, or quite regular; the body is sometimes hot, sometimes cold. The cow appears dull and listless, and when at grass, separates herself from her companions, and lies on the ground when they are feeding.

In the Second Stage.—The cough is now more frequent, and thick, frothy phlegm dribbles from the mouth; the breathing is short when the air is taken into the lungs, and long when it is pressed out of them; the inhalation is attended with much pain, causing the animal to grunt and grate her teeth; the grunt is heard when the animal is pressing the air out from her lungs; the pain is evidently increased by coughing and change of position, and to lessen it the cough is now suppressed or held back, and is

short, and the cow stands fixed in one place. The pain is owing to the pleura being inflamed, and the inflamed place may be ascertained by pressing the side, along between the ribs, with the point of the finger, when the animal will flinch and grunt at the diseased place. The pulse becomes quickened and oppressed; the skin hard, tight, and bound to the ribs; the horns are hotter and the muzzle drier than usual; the head is lowered and thrust forward, with the nose poked out; the back is raised up sometimes; little or no food is eaten; the cud is seldom or never chewed; the milk is arrested; bowels are bound, and when moved, the dung is in hard, dry lumps.

In the Third Stage.—The breathing is much more quickened, very difficult, labored, and even gasping; the breathing is carried on partly through the mouth, partly through the nose; the breath has a bad smell; a stringy, frothy fluid constantly dribbles from the mouth; the cow groans loudly and frequently, while the grunt is either gone or subdued; the pulse is quick, weak, and, in some cases, intermittent, or even imperceptible; the horns, ears and legs are cold, the skin covered with cold sweat, the head and neck stretched out, and the nose poked into the corner of the manger; the fore legs are separated from each other, and fixed in one place, unless the cow is restless and uneasy; sometimes the hind ones are crossed over each other, or the hind fetlock-joints are knuckled forward; the animal is thin and reduced to a skeleton; the strength of course greatly impaired, so that she can scarcely cough; the urine is very high-colored; toward the last, violent purging comes on, the discharged matter being quite watery, blackish, highly offensive, and sometimes mixed with blood; eventually, the cavity of the chest becomes so full of fluid, or so

much of the lung is condensed, that the breathing, from being more and more difficult, and labored, and frequent, at last ceases, and the animal is dead.

"Pleuro-pneumonia presents itself to our notice under two forms—the one acute, the other less acute; the symptoms of the acute form are: sudden loss of appetite, hurried breathing, panting, breath hot, every third or fourth respiration accompanied with a grunt, pulse very much accelerated, sometimes small and hard, at other times full and bounding, but always very quick, extremities cold, or one fore and hind leg cold and the other hot; short, husky cough, worse when the animal begins to move; if the ear is applied to the chest, a sound may be heard something like that produced by agitating a sheet of thin paper; this form of disease, if not promptly checked, generally ends in death in about eight or ten days.

With regard to the less acute form of the disease, the symptoms are very varied, which makes it very difficult to lay down any positive treatment; but there are what I shall call premonitory or warning symptoms, which, if attended to, will frequently prevent the disease becoming fully developed; these warning symptoms are a short, dry, husky cough, worse from motion, an unthrifty appearance of the coat; the animal is sometimes found standing by himself in a dull, sleepy attitude; if he is examined at this time, the extremities will be found cold and the pulse quickened; if examined again at the end of an hour or two, the extremities will most likely be found warm, and little or no irregularity will be found in the pulse—generally, the appetite is not impaired, and the animal chews the cud, but mostly standing up. Well, these are not very alarming symptoms, truly, and therefore they are seldom

attended to, although this is the very time they ought to be attended to, and medicines administered to arrest the disease. If, when an animal is observed to be in the state described above, and nothing is done to relieve it, other and more alarming symptoms soon show themselves, the appetite becomes impaired, and only a particular kind of food will be eaten, rumination is suspended or only rarely performed; if the patient is a cow, the milk is diminished, and at last wholly fails, the pulse becomes quickened, the breathing accelerated and irregular, the muzzle at times dry, hot and hard, at other times moist; the extremities are alternately hot and cold, but mostly the roots of the ears and horns are hot.

As the disease progresses, the breathing becomes slower, more regular, and accompanied with a grunting noise, the animal stands with the fore legs far apart, and remains in one position for hours at a time, breathing through the mouth, about which a white foam collects; there is sometimes a discharge from the nose, but I have frequently seen cases where there has been no discharge at all."

TREATMENT.—Preventive measures: During the prevalence of such a disease, unusual care should be taken of all animals liable to it; for although a contagion may be in the atmosphere or conveyed by contact, yet some untoward circumstance, such as cold, a chill, exposure, or bad food or ventilation, always provokes the attack; hence, at such times especial care should be exercised that food, housing and general management should be unexceptionable.

Give, also, an exposed animal the SPECIFIC for INFLAMED LUNGS, E.E., a dose of fifteen drops, every night, or every second night, experience having abundantly shown that *the Specific for a disease*

always acts as a preventive when given before the attack. Medicines, if specific and thus given, are as surely protective as is vaccination a preventive of small-pox.

At the first indications of the disease, the "hoose," which may be a day or two before any other symptoms, give the SPECIFIC for COUGH, E.E., and repeat it three times per day, a dose of twenty drops, and the disease will go no farther.

Should the disease have manifested itself with some violence, cough, breathing more or less labored and painful, manifested with the grunt, give the SPECIFIC for FEVER, A.A., twenty drops every two hours for twelve hours, and then alternate it with the SPECIFIC for INFLAMED LUNGS, E.E., at intervals of two or three hours.

In the fully developed cases of the disease (in the more advanced stages), when there is less *heat* and *fever*, but great weakness, wheezing, short, difficult breathing, small, quick, weak pulse, cold, clammy sweats, cold extremities, or with violent purging of blackish, offensive matter, omit the FEVER SPECIFIC, A.A., and give instead, every two hours, first the SPECIFIC for INFLAMED LUNGS, E.E., a dose of twenty drops, and the next two hours the SPECIFIC, I.I., for ULCERATIONS, a dose of twenty drops, and thus continue the two remedies alternately, at intervals of two or three hours. This is the treatment for all the more advanced, confirmed or malignant forms of this disease, the one remedy corresponding to the local affection of the lung and pleura, and the other to the malignant and septic character of the general affection.

The existence of dark, fetid and bloody discharges is no contra-indication for the use of these Specifics, which are fully adapted to that condition.

Food and stabling should be carefully directed, as under the article on Pleurisy, page 228.

Diseased cattle should at once be removed from the healthy stock, and be housed by themselves, at some distance from the rest of the herd. The stable should be dry and well ventilated; air and light should be freely admitted, although all draughts of air are highly injurious, and must be guarded against.

Bronchitis from Worms.

Causes.—Calves and yearlings are particularly liable to the production of parasite worms, of the genus *Filaria*, in the bronchial tubes, which are sometimes choked up with them. They are from one to three inches long, of a silvery color, and generally invade cattle fed in low, marshy or woody pasture, where there is little water.

Symptoms.—Slight catarrh; cough, at first dry and husky, then short and paroxysmal; accelerated breathing, with occasional grunting, and distress in the chest; quick pulse (100); thin nasal discharge; dullness; wasting. If these be not relieved, the animal becomes restless, manifests anxiety, breathes with rapidity, difficulty and grunting; the ears hang, the nostrils widen, the eyes are hollow; dyspnœa, debility, and atrophy end in death. Sometimes there is tolerable health, while the flesh all wastes away, and nothing is left but skin and bones. A *post-mortem* examination shows inflammation and thickening of the bronchia and lungs, and accumulation of worms, rolled together with mucous in small balls.

Treatment.—Where there is any doubt ot the existence of worms, treat as for bronchitis. If disease is evidently from an accumulation of worms in

the bronchial tubes, the inhalation of chloroform is recommended, repeated at lengthened intervals, according to the circumstances of the case.

Phthisis—Consumption.

DEFINITION.—Phthisis pulmonalis is a serious and almost always a chronic disease, characterized by the formation of tubercules in the lungs, which, increasing in size and running together, at length suppurate, and form abscesses in the substance of those organs.

CAUSES.—Neglect or injudicious treatment of catarrh, pneumonia or pleurisy; constitutional tendency developed by cold, a sudden chill, over-driving, etc.

SYMPTOMS.—Inward, feeble, painful, hoarse, gurgling cough, especially after exertion; loss of appetite; irregularity of rumination; disturbance of digestion; emaciation; loss of hair, especially of the eye-brows; unthrifty appearance.

TREATMENT.—Specifics A.A. and E.E. are the proper remedies; and given four times per day, the A.A. morning and afternoon, and the E.E. at noon and late in the evening, will not unfrequently save the animal.

ACCESSORY TREATMENT.—The animal should be housed in a stable that is comfortable and airy, but free from north or east winds, and kept apart from other cattle; it should never be hurried, excited or alarmed; the litter should be frequently changed and kept dry, and the skin frequently rubbed and curry-combed to stimulate its perspiratory action.

CHAPTER III.

DISEASES OF THE ORGANS OF DIGESTION.

Loss of the Cud.

THIS is a mere symptom which accompanies many diseases, and even morbid conditions, which scarcely deserve the name of disease, and will yield with the removal of the ailment of which it is a mere symptom. Sometimes it may be present when nothing else is sufficiently tangible to warrant treatment, or it may continue after the disease otherwise seems to have been removed.

TREATMENT.—In any case in which it appears to exist independently, or to be the principal symptom, give twenty drops of the SPECIFIC for INDIGESTION, J.K., morning and night. The "cud" will soon return.

Colic.

This disease is not so dangerous as tympanitis, yet it may prove fatal from bad treatment or neglect. It is generally the result of improper or indigestible food, or food in too great quantity, or that to which the animal is not accustomed. If colic comes on after indigestible food, it is accompanied by constipation and thirst. Certain kinds of food, such as grains, oats, decayed turnips or cabbages, or dry food, are liable to induce it, or it may arise from exposure to cold when the body is warm, or from cold drinking when the body is heated.

It consists in severe paroxysms of pain in the bowels, and, if neglected, is liable to cause inflammatory disease of the digestive organs.

The most common causes are: sudden changes from grass to dry food, or from dry food to grass; eating grass covered with hoar-frost, or grass that has fermented after being mown; musty corn; drinking large quantities of cold water when the animal is hot and perspiring; too large quantities of green food; worms; inflammation; food given too soon after exertion, or given in too large quantities to greedy animals. Some cases of colic arise from causes which it is difficult to ascertain.

Symptoms.—Sudden manifestation of pain in the belly, by uneasiness, pawing the ground, striking the belly with the hind legs or horns, often lying down and then rising, grinding the teeth, and moaning. When caused by wind, the belly is much swelled on the left side, and there is frequent passage of flatus. The animal's back is arched, and she frequently looks at her flanks, scrapes with her fore feet, and kicks with the hind ones. All these symptoms increase, until she expires amid groans and grinding of the teeth. Or the following may be noticed:

The animal refuses to eat, looks to its sides, paws the ground, kicks against the body with the hind feet, lies down, rises again, and continues these movements till unable longer to keep upon its feet. Often the animal falls down so violently that it seems as though the four legs were suddenly struck away from under it, or he squats down like a dog upon his hind quarters, rolls over, lies upon his back for a time, with the legs stretched upward, and generally acts as if frantic. The horns, ears and feet are alternately hot and cold. The animal suffers from thirst and constipation, the longer the

constipation the more acute the pain; the paunch is much swollen. If recovery takes place, the symptoms are gradually mitigated, and then entirely disappear. On the other hand, if the pains get worse and become more frequent, the bowels become inflamed, and if the pains, under these circumstances, suddenly disappear, the inflammation terminates in *gangrene* (mortification), and the animal dies.

TREATMENT.—The SPECIFIC for COLIC, F.F., will almost invariably be found successful. Give a dose of twenty drops every half-hour until relieved. If not better after a few doses, and should there be fever, alternate the SPECIFIC, A.A., for FEVER, the same dose, with that for COLIC, F.F., at the same intervals. As the animal seems relieved, or partially so, give the remedies at longer intervals.

Constipation.

This is rarely of grave consequence in cattle, and when it exists, is usually a symptom of some other disease. When present, a dose of twenty drops of the SPECIFIC for INDIGESTION, J.K., given morning and night, will soon set all right again. If there is suspicion of some inflammatory condition lurking in the system, the FEVER SPECIFIC, A.A., in like doses, will have the like effect.

Hoove or Blown, Over-fed.

The most frequent cause is, turning an animal into rich pasture, when, from over-eating, the stomach becomes so distended as not to be able to act upon its contents. The food then undergoes chemical changes, in the process of which an immense amount of gas or wind is generated, producing swelling, distension, etc.; drinking very cold water, and especially eating too much bran, chaff, grains, oats, wheat, corn, is followed by similar consequences, in an intensified degree.

SYMPTOMS.—The disease is known by the animal being swelled, or "blown," over the whole belly, but especially at the stomach and left side, where the distended stomach lies; the swelling yields to the fingers, and gives a hollow, drum-like sound when struck; there are sour or noisome belchings of wind; the cow does not move, moans and breathes with difficulty, neither eats nor chews the cud.

As the disease progresses, the pulse becomes full and hard, and quicker than before; the eyes are red and protruded; the mouth is filled with frothy slaver, and the tongue hangs out; the back is crouched, and legs drawn under the body; the cow becomes insensible when the swelling is at its height; she stands in one place, continually moaning or grunting; she falls and struggles violently; sour fluid, mixed with food, rises from the stomach, and is discharged from her nostrils and mouth, and at last, death.

TREATMENT.—Give the SPECIFIC for COLIC, F.F., every fifteen minutes, a dose of twenty drops. After an hour, alternate it with the SPECIFIC for INDIGESTION, J.K., at the same intervals; and when better, prolong the intervals to half an hour, an hour, or two hours.

In some extreme cases, when, as from eating new clover, or other rank succulent food, the production of gas is immense and the animal rapidly growing worse; the trocar, or even a narrow-bladed knife, may be used, to afford immediate relief. It must be plunged inward and downward into the paunch, on the left side of the belly, midway between the last rib and the haunch-bone. This is only a resource in extremity, as the SPECIFICS, F.F. and J.K., in all such cases act promptly and perfectly, as experience has abundantly testified.

Tympanitis—Hoove—Blown—Drum-Belly—Grain-Sick—Heaving of the Flanks—Maw-Bound.

This disorder—of very frequent occurrence among cattle, though not belonging exclusively to them—is of two kinds; one due to the evolution of gas from the food taken, the other to the impaction of the food. In one case the gas produces enormous inflation of the rumen, or first of the four stomachs possessed by cattle, in the other distension.

DIAGNOSIS.—To Mr. Surmon we are indebted for the following table of

DIFFERENCES BETWEEN DISTENSION FROM GAS AND FOOD.

DISTENSION FROM GAS.	DISTENSION FROM IMPACTED FOOD.
The left flank, on pressure, feels soft, elastic and yielding to the fingers. On percussion, sounds hollow and drum-like.	The left flank, on pressure, feels solid; does not yield readily to the fingers. On percussion, or on being struck, sounds dull.
Frequent belching; the wind which escapes has an offensive smell.	No belching or eructation of wind.
Respiration quick, short and puffing.	Respiration not much interfered with.
Position standing; head stretched forward, unable to move; moans, and appears in great distress; eyes red and staring.	Position lying down, and is with difficulty induced to move; looking dull and listless.

Causes.—When cattle, especially such as have had poor and scanty food, are turned into a rich pasture, or stray into fields of lucern, etc., they will often eat ravenously, and take more than they can digest. Wet grass in warm weather, or fodder that has become heated in consequence of being heaped together while damp, may also be too freely eaten. The consequence is that the rumen is overloaded, and the contents, under the influence of warmth and moisture, ferment and evolve what is at first carburetted hydrogen, and subsequently sulphuretted hydrogen; or, if there be no formation of gas, the food remains solid and undigested. Drinking excessively of cold water, eating too much bran, chaff, unboiled potatoes, uncrushed oats, grains, boiled roots or turnips, may cause the same condition.

Symptoms.—These may appear suddenly, but always soon after the animal has been feeding, generally on returning from the field; they may, however, occur in the stable The animal ceases to eat or ruminate, is swollen or "blown" over the whole belly, but particularly at the flanks or left side, where the distended stomach lies. The rumen is enormously swollen, the pillars of the œsophagus are tightly closed, thus preventing the escape of gas; and the greater the distension the firmer is the closure of the œsophagus. The swelling yields when pressed by the finger, and gives forth a hollow sound, like that from a drum when it is struck. There are also sour and noisy belchings of wind; the cow does not move, moans, and is evidently in great distress. The distended rumen presses on the diaphragm and impedes the action of the heart and lungs, causing shortness and difficulty of breathing; the nostrils are widely dilated, and there is a threatening of suffocation. As the disease advances,

the pulse becomes hard, full, and quicker than before; the eyes are bloodshot, glazed, fixed and prominent; the mouth is hot and full to dripping of frothy slaver; the tongue hangs out; the veins of the neck and chest are distended with blood; the poor beast crouches, with its back bent up; the legs are drawn under the body; the tail is curved upward; the anus, which is closed, protrudes. The body is now covered with cold sweat; the animal stands in one place, continually moans or grunts, trembles, totters, falls, struggles violently, ejects from mouth and nose sour fluid mixed with solid food, and at length sinks and dies, either from suffocation or rupture of the stomach.

TREATMENT.—Specific F.F. is sovereign, and may be given a dose every quarter or half hour; it cures every time. We give the method of puncturing, which, however, need never be resorted to if the Specific F.F. be administered.

Puncturing.—Relief is sometimes very urgently required, and this is best afforded either by plunging a trocar into the left side, or by passing a probang down the œsophagus into the paunch. If the trocar is used, let the canula of the instrument be ten or twelve inches long, so as to prevent the paunch from slipping away from the canula and causing delay, and perhaps further danger. *Chloride of Lime* is valuable after the animal is somewhat relieved by the use of the trocar; about two drachms should be mixed with a quart of water. In case of immediate relief being imperative, and a trocar not being at hand, a long, sharp-pointed pen-knife may be used for puncturing. The place for puncturing is midway between the hip and ribs, where the distended rumen is prominent; the direction is inward and downward. The puncture will be followed by

an outrush of gas, fluid, and even portions of food. A quill, or some other tube, must be ready to be inserted in the hole immediately after the knife is withdrawn, otherwise the wound will close. If nothing tubular be at hand, a smooth piece of stick must be put in, or anything else that will serve the purpose of keeping open the wound till the gas has escaped. The danger of this operation is not from the wound itself, but from the escape of the contents of the paunch into the abdomen, which would cause peritonitis, or from piercing the spleen or kidney. The operation can only be regarded as a rough one, to be adopted in case of great emergency.

When distension has ceased and matters have to some extent resumed their ordinary course, the animal should remain some hours without food or water. The food afterwards should be sparing and suitable.

SPECIFIC J.K. should be administered two or three times daily until the animal is fully recovered.

Indigestion.

CAUSES.—Attacks of indigestion are caused by errors in diet; the beast fasts too long in the stable, and then greedily eats its fodder and overloads its stomach; or has not enough suitable food; or is irregularly fed; or there is too abrupt transition from green food to dry, and from dry food to green, in spring and autumn; or it may arise from sending beasts into fields wet with dew; or from bad fodder or impure water. The stomach of calves may be overloaded when they are weaned too soon and fed on improper food, such as bran and water.

SYMPTOMS.—Loss of appetite; dislike of food; suspension of rumination; hard and infrequent evacuations; diarrhea.

TREATMENT.—If there is considerable fever, indicated by quick pulse, hot ears and horns, variable temperature of extremities, SPECIFIC A.A., every three or four hours, will often speedily produce recovery. When the paunch is distended with gas, SPECIFIC F.F. should be given. SPECIFIC J.K. will be found efficacious when rumination is suspended, the dung soft and fœtid, and the animal coughs and moans. When the digestive functions are not fully restored, recourse must be had to the same, J.K. If there is much debility, or diarrhea has set in, it is best to alternate the I.I. with the J.K., particularly when the diarrhea has stopped.

The diet must consist of bran and boiled oats; if hay is given, it is best to steam or soften it by pouring water upon it, and allow the animal to drink the liquor. Calves should be fed on rye bran, or wheat boiled in water, no more being given than they can take at once, lest the liquor becomes sour.

Diarrhea, Scouring.

Diarrhea is more common in old cattle and calves than in those of middle age, where it is generally of little importance, soon correcting itself, especially in the spring, when herds are first turned into green fields. The usual causes are: decayed cabbages, bad grains, or other improper food, or impure water; sudden change to rich pastures; the use of purgative medicines; exposure to cold and wet; acrid bile; sudden change from dry to wet weather, or severe exertion in hot, dry weather.

SYMPTOMS.—The disease comes on slowly, with staring coat, shaking, arched back, fore legs drawn together, cold legs, ears and horns, weak pulse, tucked-up belly, bowels rather looser than usual, deficient appetite. The animal becomes thinner.

more depressed and dull; little or no milk is given, and the bowels are purged to an alarming extent. This purging may stop and then reappear to end fatally, or terminate in dysentery.

TREATMENT.—We should, of course, give food not so loosening in its character and the SPECIFIC for DIARRHEA F.F., a dose of twenty drops two or three times per day, will usually be found quite sufficient. In extreme cases, or in case of failure with this remedy, the SPECIFIC for ULCERS I.I., may be alternated with it, at the same or even more frequent intervals.

Diarrhea or Cholera or "Skitt" in Young Calves or Colts

Is quite common, and not unfrequently dangerous, especially in fine sheep and choice bred cattle. In its more dangerous form it appears the first or second day, and it is then presumably caused by the feverish or unhealthy condition of the mother's milk. In its natural condition, this first milk is laxative and intended to act as a removal of the first passages in the new born calf.

When the milk is very rich in butter, as in the Jersey cattle, it becomes excessively laxative, especially during the period of the milk fever, or the first three days after calving. The passages are noticed to be very frequent, loose, liquid, or even watery, with weakness and rapid wasting; the legs and ears become cold, and, in extreme cases, short breath and panting with the tongue out.

TREATMENT.—The dam should always have a dose of Specific A.A. soon after calving, and this should

be continued, a dose at least three times per day for four days, or until the usual danger from milk fever is passed.

If, however, the dam has had no Specific treatment, give her a dose alternately of the A.A. and of the F.F., at intervals of three hours, to change the feverish or unhealthy nature of the milk, as well as to give the calf the Specific through the mother's milk.

Give also to the calf a dose of five drops of Specific F.F. once in three hours if the case is urgent, or three times per day if but slight, and gradually omit as the calf improves. If the Specific F.F. fails, give Specific I.I., a dose every fifteen minutes or half hour at first until relieved, then once in three hours until cured.

Older calves or cattle only require change of pasture or food, or a dose of the Specific F.F. once or twice per day, for their cure.

In addition to what has been said above, it may be remarked that at times—especially in high-bred calves and from causes already there mentioned, young calves are attacked with a virulent and often times fatal form of diarrhea or cholera.

The discharges are frequent, watery, violent, repeated every few minutes; the calf becomes cold and shivering and shrunken ; the breath frequent, short and panting, and unless help is afforded soon dies.

In this condition, the usual SPECIFIC F.F. for COLIC AND DIARRHEA while available in all usual cases of diarrhea, hardly meets this, while the SPECIAL VETERINARY SPECIFIC F.F. x fully meets the want and may be relied upon to arrest the discharges and restore the sinking vital powers. In

case SPECIAL SPECIFIC F.F. x is not at hand resort may be had to SPECIFIC I.I.

Give a dose of five drops of SPECIAL SPECIFIC F.F. x and repeat the dose at first every half hour, or even every fifteen minutes, until the urgent symptoms have abated, and then once in two or three hours until relieved.

☞ To meet the want of something yet more positive and prompt in its action than Specific F.F., we have a SPECIAL SPECIFIC marked F.F. x, designed especially to meet those very serious and often fatal cases.

Dysentery, Bloody Flux.

This is a very severe and often fatal form of disease, which prevails mostly in spring and fall, and in some sections of country, and in peculiar states of the weather and growth of feed, becomes a most destructive scourge. It is usually attributed to feed growing upon wet or marhy grounds, or pasture sometimes under water; or to rank grass growing in the woods; or drink from impure, still and stagnant waters. It appears also when animals are exposed to alternations of hot and cold weather, live upon bad food, or are over-driven. It is seen in cattle driven a long distance and insufficiently or badly fed, or with food to which they are not accustomed. Poor and fat cattle are alike subject to it; it comes on after "hoose," or the disappearance of some skin disease, or sudden stoppage of milk, or as a termination of diarrhea.

SYMPTOMS.—Shaking, dullness, anxiety, dry skin, slightly rough hair and general uneasiness. In some cases the bowels seem bound, the dung hard,

dry, in small lumps, and the discharge attended with pain; in others, the dung is soft, discharged frequently, and the animal wastes, and loses appetite and spirits. In others, again, the purging is almost constant, attended with pain, gripes, straining and forcing out of the fundament. In this stage the discharge is watery, mixed with white shreds or dark-colored blood, with little or no dung, and attended with a horrible bad smell. These violent symptoms may disappear, but the purging and wasting continue as bad as ever, or stop for a short time and then return again, and continue until the animal is worn out by the constant drain; or, the dysenteric discharges are arrested and improvement begins and goes on slowly. In some extreme cases, the wasting is so excessive that the animal is reduced to a mere bag of bones, the joints swelled, body covered with sores, strength gone, eyes hollow and dim, parts under the jaw enlarged, body covered with vermin, discharges mixed with blood and horribly offensive, and the skin bedewed with cold sweat. Such extreme cases are often hopeless.

TREATMENT.—Give twenty drops of the SPECIFIC for DYSENTERY, F.F., every three hours, or even more frequently in the more urgent cases.

In the extreme cases, with great prostration and weakness, alternate the SPECIFIC for ULCERS, I.I., with that for DYSENTERY, F.F., at intervals of two or three hours, and continue the course patiently, prolonging the intervals between the doses as the animal improves.

Stomacace—Ulceration of the Mouth.

This is a contagious vesicular affection of the mouth, which often attacks a whole herd.

SYMPTOMS.—Heat and redness of the mouth, attended with diminution of appetite and milk,

which is also watery. In a few days there is a small red eruption, which enlarges, forms white vesicles, of various sizes, from that of a poppy seed to that of a pea, which burst, and leave behind a scab. The irritation and pain prevent eating; the animal drinks and dribbles. In favorable cases the tongue gradually cleanses; otherwise the vesicles become confluent and livid, and leave behind corroding ulcers, which exfoliate the mucous membrane of the mouth. The throat is inflamed, the breath fetid, cough is induced, and the animal wastes away.

TREATMENT.—Specific C.C. will usually cure the disease, given morning and night. If obstinate give Specific C.C. morning, and Specific I.I. at night.

Rinsing the mouth with a weak solution of the MARVEL will tend to destroy the fœtor of the mouth and favor the cure. Care should be taken that the animal have nothing but soft food.

Aphthæ—Thrush.

DEFINITION.—An inflammatory fungoid product, consisting of numerous minute vesicles, and terminating in white sloughs on the surface of the mouth. It is due to an acid condition of the mucous membrane.

SYMPTOMS.—Thrush often occurs in sucking calves or lambs, and is occasioned by the bad quality of the mother's milk. The mouth is filled with white ulcers or small blisters; a frothy, stringy and foul saliva flows from the mouth; the sucking of the animals is impeded, and they become thin.

TREATMENT.—Specific C.C., in alternation with Specific I.I., will be found effectual, giving a dose of each twice in the day for the more urgent cases, and morning and night for milder ones.

Accessory Means.—Attention should be paid to the mother's food, which must be sound and nourishing; a clean and comfortable stable or shed should be provided for her; Specific J.K. should be given to her; and when the disease has subsided, a dose of the same should be given to the calf night and morning for a few days.

Boulimia—Excessive Appetite.

An unusual increase of appetite is a symptom of a morbid state of the constitution. Though the animal eats largely, greedily, and even shows a disposition for uncommon food, which he takes gluttonously, he may become more and more emaciated. Suitable food should be given; at the same time it should be fresh, and not in excessive quantities, although there is a desire for it. Fresh, cold water should also be given.

Rumination.

Oxen and sheep belong to the class of animals known as Ruminants, which feed principally on the leaves and stalks of plants. The quantity of food which they take at a time is very considerable; with a powerful prehensile tongue, they rapidly gather up into their mouths thick and long tufts of grass, which are only slightly masticated, and immediately swallowed. Four stomachs—so-called, although the fourth stomach is the true stomach, and the other three are appendages of the œsophagus—are employed in the process of digestion. The first—the paunch, or rumen—is by far the largest of the four, occupying three-fourths of the abdominal cavity. Its mucous membrane is rough with *papillæ* or eminences, and protected with a dense scaly *epithelium*. The second is called the recticulum, or

honey-comb bag, because the lining mucous membrane is so disposed in folds as to form hexagonal spaces; within these spaces the tubes of the glands may be seen. This bag is the smallest of the digestive organs, is connected with the anterior part of the paunch, with which it communicates freely, and to which, indeed, it may be regarded as dependent. The third cavity is the *manyplies*, *maniplus*, or *omasum;* the first name being given on account of the many plies or folds formed by the mucous membrane. These folds are of unequal breadth, the principal ones being separated by others, which gradually diminish in size. The surface is covered with *papillæ*, the folds being flattened at the sides and somewhat pointed at the fore edges, forming ridges and furrows. The contents of the manyplies are always dry; the food sometimes becomes compressed into thin cakes between the folds, and the epithelium manifests a tendency to peel off in shreds and adhere to the pulpy mass of food. The fourth cavity—the *abomasum* or *rennet*—is the true stomach, discharging the same functions as the stomachs of those animals that have only one such organ. It is considerably larger than either the second or third stomach, although less than the first; is lined with a thick villous coat, which is contracted into ridges and furrows, somewhat like the omasum, and secretes an acid, solvent juice, essential to the process of chymification. The act of rumination calls into exercise the first three organs. The crushed food passes from the œsophagus to the rumen; there it remains for some time, subject to the action of heat, saliva, mucous and the secretion of the organ. The tougher the food the longer it is retained. From the rumen the food passes to the recticulum, where the operation of maceration, commenced in the first

stomach, is continued, the operation being facilitated by a slow, churning movement characteristic of both organs. The recticulum also appears to be the special receptacle of the fluid that is swallowed, for this at once passes into it, without going into the first stomach. The precise nature of the action of the secretions is uncertain. It is supposed to be a fermentation; no doubt at all times a certain proportion of gas is evolved from the food, but excessive fermentation is indicative of disease (Hoove), and of rapid and dangerous chemical change in the contents of the rumen. The pulpy mass, to which the food has been reduced by the chemical change and churning movement of the first two digestive cavities, is now prepared for thorough mastication by the teeth, and for ultimate solution by the digestive fluids. This mastication is *rumination*, or "chewing the cud." The return of the food to the mouth for this operation is effected by the churning movement and by the contraction of the diaphragm and abdominal muscles, which press upward against the rumen and reticulum. The act of regurgitation is very evident to an observer, who sees a large mass ascend from the paunch and distend the œsophagus with an eructating noise. At the moment that a mass of the food passes into the mouth, the accompanying liquid is swallowed into the first of the three stomachs, leaving the solid portion to be slowly ground by the teeth. The length of time thus taken varies with the toughness of the food. Young and very old animals take longer to chew the cud than healthy adults. When the food has been sufficiently comminuted it is again swallowed, some of it into the first two stomachs; but, by a peculiar mechanism of muscular contraction, the passage into the first is so closed that the greater

portion of it passes through the opening into the third stomach, from which it goes into the abomasum. The function of the omasum appears to be to regulate the descent of food into the abomasum, though some means of assimilation may take place between its many plies. The last stomach, as already stated, completes the process of digestion.

Clue—Fardel Bound—Dry Murrain—Grass Staggers—Retention of Food in the Maniplus.

The Maniplus, or Manyplies, is a sac provided internally with numerous folds or duplications of its articular lining, which are covered with numerous rough papillæ. In this stomach (the third of the four possessed by cattle) the food undergoes its last preparation for the abomasum, or true digesting stomach. It is very liable to derangement in connection with almost all severe diseases, especially those that are inflammatory, acquiring sympathetic inflammation, and consequently losing its digestive function. It is also sometimes the seat of idiopathic disease, sometimes acute and rapidly fatal, some times chronic. In some cases, fine, dry, hard vegetable matters are tightly pressed between the folds. and adhere in cakes so closely to the mucous membrane that their removal is always attended with loss of the epithelium which covers the surface; in other cases, a soft, macerated, putrescent mass is enclosed; in neither class of cases does nutrient matter pass into the abomasum. Sometimes the folds are in a state of gangrene, and the abomasum is highly inflamed. The disorder is very common in Ireland.

Causes.—These are obscure. Clue is occasionally epidemic, and attended with great mortality. It

has been supposed to be due to bad or coarse fodder, or sudden change of diet.

It is known by excitement, sometimes to the extent of delirium, followed by dullness and unwillingness to move; the animal stands with its head depressed, or thrust against a wall, and indifferent to surrounding objects. This condition is attended with dryness of the muzzle, protusion of the tongue, congestion of the membrane of the nose, protusion and redness of the eyes, rapid, hard pulse, confined bowels, scanty, highly-colored urine, stoppage and deterioration of milk. As the disease increases, it is attended with increased congestion of the head, loss of consciousness, trembling, distention of the abdomen, coldness of the limbs, torpor, death.

TREATMENT.—If the fever run high, the pulse be quick, horns and ears very hot, muzzle hot and dry, extremities varying in temperature, as well as muzzle and ears, the Specific A.A. should be given, a dose every two or three hours, and this should be continued until the fever has somewhat abated, when the Specific J.K. should be given in alternation with Specific A.A., at intervals of three or four hours, according to circumstances.

If the animal has been neglected, or has been drenched with a host of allopathic compounds, or the disease has passed into a chronic form, or is symptomatic of some other disease, then the chances will be much against recovery. In cases of this description, time must be given for the stomach to relieve itself of its contents, and to resume a normal condition; but most persons know very little about the *modus operandi* of nature; their object is to get something through the animal as quickly as possible, and the bowels are looked upon and treated as a terrible enemy. The bowels will be all right as soon as the irritation is relieved.

Great care must be taken with respect to the diet of the animal; a thorough change would be advisable, and the administration of such food as can be easily digested. Frequently the animal will eat but very little.

Irregular Teeth

May be looked for if an animal presents the following symptoms: The beast becoming thinner gradually, and eating less food than usual; slaver dribbling from the mouth along with half-chewed food, especially while the cow is cudding; she is "hoven" or bloated at different times; a bad smell comes from the mouth, arising from ulceration of the side of the cheek, caused by irregular teeth.

TREATMENT.—The mouth must be carefully examined, and all long or irregular teeth must be shortened and smoothed by means of the tooth-rasp.

Jaundice, the Yellows.

This may be caused by torpidity of the liver itself, or obstruction of the gall-duct, in consequence of hardened bile (gall stones) filling up the passage, or from the presence of the fluke-worm in the gall-duct; or it may arise from inflammation or other disease of the liver.

SYMPTOMS.—These will vary from the progress and severity of the disease and the causes which produce it, but it will essentially be as follows: In some cases the pulse is full, hard and accelerated; the breathing quickened, with panting at the flanks, thirst, hot mouth, scanty urine, loss of cud and appetite, and other symptoms of fever. In some cases there is loss of spirits, dullness, or sleepiness, unwillingness to move and weakness; the body wastes and shows other signs of impaired condition;

the eyes, skin and urine are at first tinged with yellow, which afterward becomes deeper and more distinct; scales form on the skin; the bowels are at first confined, but purging afterward comes on, and may be so rapid and excessive that it cannot be arrested, and the animal dies in consequence. The milk also becomes yellowish and somewhat bitter.

TREATMENT.—The SPECIFIC for JAUNDICE, J.K., may be given, twenty drops morning and night, in the torpid cases, when there is little or no fever. But when fever and hot mouth are present, alternate the SPECIFIC for FEVER, A.A., with that for JAUNDICE, J.K., four times per day, in the same doses, that is, two doses of each during the day.

If a violent purging comes on, give twenty drops of the SPECIFIC for DIARRHEA, F.F., every three hours, until relieved, and then return to the SPECIFIC for JAUNDICE, J.K.

Hepatitis, Inflammation of the Liver.

This disease is more common in oxen than in horses. It is rarely seen except in winter, and in animals fed in the stable. It may be mistaken for inflammation of the chest, to which it has some resemblance.

SYMPTOMS.—The animal prefers lying down, but always on the left side, and with the head turned to the right. The heat is greater in the region of the liver on the right side, and pressure there induces pain; the animal eats little or nothing, and cannot walk or stand up without pain, constantly stumbling. If the disease is acute, there is high fever, with increased heat of body and accelerated pulse; the horns and ears are alternately hot and cold; the milk is yellowish and bitter, portions of the skin are denuded of hair; the eyes, mouth, gums and tongue

(which are covered with thick mucous), the nose and teats are *yellow;* the urine is of deep yellow color; and there is sometimes a dry and painful cough. In chronic hepatitis the fever is considerable, or wanting altogether, but the yellow tint is more marked and general; the milk, equally yellow and bitter, soon forms a caseous mass, from which a yellow serum separates; the right side of the body seems tense and swollen; the intestines do not empty themselves, or the scanty ejections resemble putty or clay. The acute form lasts from eight to fifteen days, and the chronic many months.

TREATMENT.—In the more acute form, attended with heat and fever, the SPECIFIC for FEVER, A.A., should be given, a dose of twenty drops four times per day.

In the chronic form, the Specific A.A. may be given each morning, and that for INDIGESTION, J.K., each evening, twenty drops, which will usually be found sufficient.

Gloss Anthrax, Blain, Black Tongue.

This is an epidemic and sometimes fearfully fatal disease, which has prevailed under different modifications at various seasons, in different sections of the country. It appears to have its origin in some peculiar atmospheric conditions, favored, doubtless, by exposure or impoverished keeping, and is then propagated from diseased to healthy animals. It is most common in spring and fall.

SYMPTOMS.—The animal appears low-spirited, dull and does not eat or chew the cud; a clear fluid without smell constantly flows from the mouth; the head and neck constantly swell, until they are much increased in size; the breathing becomes difficult and obstructed, in some cases so much so that the

animal cannot breathe, and death results early from suffocation; the fluid from the mouth becomes like matter, or is mixed with blood, and of very disagreeable odor; the tongue becomes swoolen, and its sides covered with large red blisters, which rapidly increase in size, and at last burst, discharging their contents and leaving deep sores, which are apt to mortify. Other blisters successively arise, and run the same course. Symptoms of low fever come on, the whole of the tongue becomes inflamed and swelled; at last a portion of it mortifies, turns black, and the animal dies, sometimes within a few hours from the beginning of the disease.

TREATMENT.—The diseased animal must be removed from the herd, and care be taken to prevent healthy animals being affected, by not using the same vessels or articles for both. The attendant should be careful not to get the fluid from the mouth upon any sore on the hand or person, or he will be likely to suffer. The blisters forming on the tongue or mouth of the animal should be opened freely as early as possible.

FOOD.—As the cow cannot swallow, on account of the pain and swelling of the tongue, gruel should be horned down occasionally during the day. Some should also be placed before her, so that she may take it if she feels disposed.

Give the SPECIFIC for DISTEMPER, C.C., a dose of twenty or twenty-five drops, every one, two or three hours, according to the intensity of the disease. After twelve hours, or three or four doses have been given, if the animal does not seem to improve, give the Specific I.I., in doses of twenty drops, in alternation with the C.C., at intervals of two or three hours. and so continue through the entire disease.

Splenitis, or Inflammation of the Spleen.

Splenitis is rarely observed in oxen, except in cold, damp weather, and it differs from carbuncle or typhus, but occasions death no less rapidly. Its prominent symptom is a *brownish color of the tongue.* It is most frequent among working cattle, especially if put to labor soon after eating, and before they have had time to chew the cud.

Symptoms.—It generally begins with symptoms of pain in the belly, attended with quickened breathing and heaving at the flanks; pain is manifested at the upper part of the flanks when pressed upon; the muzzle is dry and roughened, and the tongue brownish; there are frequent low moanings; no appetite or chewing of the cud; a swelling will be found at the left side and flank, which may be mistaken for hoove; but the two diseases will be distinguished by noticing that in hoove the swelling is greater and comes on very rapidly, and that when struck upon, a clear, hollow, drum-like sound is returned, while in inflammation of the spleen the sound is dull and heavy; the animal is lame when he walks, or he walks with difficulty.

Treatment.—The Specific for Fever, A.A., will be found to cover the disease perfectly. Give twenty drops every four hours.

Wood Evil—Moor Ill—Pantas.

Definition.—An inflammation of the abomasum or fourth stomach of the bowels, and frequently of the lungs, attended with repletion of the maniplus and general.

Causes.—When cattle have had, during the winter, only dry fodder and are turned into the woods in the spring, they frequently devour the

acrid and styptic buds of trees, such as the ash and oak, which cause irritation of the stomach and intestinal canal. Bad winter food, frozen roots, herbs covered with frost, the feed of marshy pastures and impure water will also produce the same disorder.

SYMPTOMS.—The earlier symptoms are: dejection, stumbling with the hind feet, which are kept very close together, and general feverishness. The breath and surface of the body are hot; the mouth and nose dry; the thirst constant and great; the eyes and nostrils bloodshot; the pulse quick and hard; the rumination rare and slow; the coat staring; the skin hide-bound; the constipation of the bowels obstinate, and discharge of urine scanty. What alvine excretions there are, are bloody, dry and black; the urine high-colored, strong-smelling and bloody; the milk disgusting. The animal loses flesh; takes unnatural food—sticks, bones, rubbish, keeping them in the mouth for some time; drinks puddles rather than clear water. At the same time the loins are weak and tremulous, as if paralyzed; the flanks heave; the shoulders and chest are stiff; there are symptoms of congestion of the brain; the animal is indisposed to move, and moans with internal pain; suffers from diarrhea, with fetid, blackish, bloody excretions; cannot rise; becomes cold all over the body; and dies of gangrene. Such is the course of the malady, unless it be arrested in the earlier stages by suitable remedies. The disease, however, is very rapid in its progress.

TREATMENT.—Specific A.A. should, from the first, form our main reliance. Give a dose of twenty drops every two, three or four hours, according to the urgency of the case. After there is some remission of heat and fever, alternate the Specific F.F.

with the A. A., at the same intervals, more especially if the excretions are black and offensive, or with Specific I.I. if there is great weakness and debility.

Gastritis--Gastro-Enteritis--Inflammation of the Stomach.

DEFINITION.—Gastritis is inflammation of the mucous membrane of the abomasum, extending, generally, into the duodenum (gastro-enteritis). It is not of unfrequent occurence, and usually accompanies enteritis. (See next section.) It is a very dangerous disease, and frequently terminates fatally.

CAUSES.—They are the same as those of enteritis —improper food, musty hay, acrid plants, impure water, etc.

SYMPTOMS.—The beast is heavy, dejected, restless, scrapes the ground with the fore feet, strikes the belly with the hind feet, grinds the teeth, looks around at its flanks and belly, groans, lows; the look is sad, the eyes red; the ears, horns and feet cold; the muzzle dry; the abdomen somewhat swollen and extremely tender; there is diarrhea and vomiting, and cessation or deterioration of milk, which, when drawn, is thin, yellowish, stringy, and irritates the udder; sometimes it is reddish and offensive. Spasms and colic are occasionally so intense as to make the animal furious. M. Gelle has observed that the most constant symptoms of gastritis are: loss of appetite, arrest of rumination, and abnormal condition of the tongue. If the inflammation be intense, the tongue appears to be contracted, straighter and more rounded than usual, red at the point and along the edges, and the papillæ are elevated and injected. In some intense cases, when several of the viscera are involved, the tongue is yellow or green.

TREATMENT.—Specific A.A. is the first and principal remedy, and may be given, at first, a dose every half hour or hour. As the animal improves, the intervals between the doses may be prolonged, and only at the conclusion, when the animal has become free from the more active smyptoms, or they have subsided, the Specific J.K. may be given for the remaining debility of the digestive organs.

No solid food should be given until convalescence set in. Small quantities of fluids may be given in the form of oat-meal or flour gruel, or water.

Enteritis—Inflammation of the Bowels.

DEFINITION.—Inflammation of the intestines, throughout a greater or less extent of their course, and involving all the coats of the intestines or only the mucous lining.

It generally attacks cattle of middle age and robust health; sometimes appears as an epidemic in certain districts, and seems to be most prevalent in hot summers.

CAUSES.—Sudden exposure to cold, or drinking cold water when heated; eating acrid or unwholesome plants; mildewed food; too stimulating diet; drinking impure water; sudden change from poor to rich food; colds; injuries inflicted on the abdomen; the presence of a large number of worms in the intestines; badly-managed colic, continuing more than twenty hours, and ending in enteritis; animals inflicted with colic may so injure themselves by falling or rolling over that this complaint may be the consequence.

SYMPTOMS.—Shivering, dullness, extreme restlessness; frequent lying down and rising again, with signs of pain in the bowels; hard, small and rapid pulse; quickened breathing; hot mouth and violent

thirst; red and protruding eyes; pawing and kicking; frequent efforts to urinate, but no water, or only a few drops, are discharged; the pain, which is most intense and constant, is increased by pressure and moving about. The hair is rough, the loins tender, the abdomen swollen on the left side, and incapable of bearing pressure; the bowels are obstinately confined; the fæces hard and glazed with slime; but occasionally liquid dung is forced with dreadful agony through the hardened mass obstructing the lower bowel, and all previous symptoms become aggravated. If the latter disease lasts a few days, and there is a sudden cessation of pain, this is a sign that *gangrene* (mortification) has set in; the feet and ears become quite cold, and after a while the animal falls heavily, struggles convulsively for a brief period, and dies.

DIAGNOSIS.—As the symptoms of this violent complaint resemble, in many respects, those of colic, it may be well to point out the distinctions between the one and the other.

DIFFERENCES BETWEEN COLIC AND ENTERITIS.

COLIC.	ENTERITIS.
The attack is sudden.	The disorder generally comes on gradually.
The pain is intermittent.	The pain is incessant and increases.
The pain is relieved by friction and motion.	The pain is aggravated by friction and movement.
Debility is not a characteristic till near the end of the disorder.	Debility is very characteristic.

TREATMENT.—Specific A.A. should be given at first, a dose every fifteen minutes, and after an hour, a dose every thirty minutes, and after three or four hours, a dose once an hour, which should be continued until the disease yields; only should there be considerable gas or bloating, or extreme pain, a dose or two of Specific F.F. may be interposed.

ACCESSORY MEANS.—Hot water is a valuable adjunct in the treatment of the disease. It may be applied externally by steeping cloths in the water, and closely and compactly, but not too tightly, applying them to the body, and securing them by belts. Hot water may also be given, either as a drench or as an injection. The water must not be so hot as to scald the animal. The administration of Specific A.A., as stated above, and hot water applied copiously to the body of the animal locally, and occasionally in doses of from a half-pint to a pint internally, will constitute the principal features of the treatment at the commencement of an attack. If applications of hot water are used, the animal should be afterwards rubbed dry and well covered with suitable dry cloths.

If discovered in time, an inflammation of the digestive organs will generally yield to the prompt use of the above remedies. Linseed tea, or oatmeal gruel, will form the most suitable diet.

Peritonitis—Inflammation of the Peritoneum.

Inflammation of the membrane which invests the abdominal viscera is very similar to enteritis. It is rapid in its course, generally ending fatally in six or eight days.

CAUSES.—Lesions, contusions, and wounds of the walls of the abdomen; surgical operations, castration, sudden cold, and heating food after calving.

SYMPTOMS.—Inflammatory fever; the animal shows great sensitiveness when the abdomen is touched, shrinking when any one approaches it, or flexing the painful part when it is touched; looks around at the seat of pain; generally there are swelling of the belly and tightness about the flanks. The beast rarely lies down, or, if it attempts it, rolls on its back; when standing, it keeps the extremities near the centre of gravity, and bends the back downward. The abdomen is hot, the ears and hoofs cold; the pulse rapid, short and wiry. The termination may be in acute ascites, in adhesions of the peritoneum, or in gangrene, the latter being recognized by sudden cessation of pain, small, weak and intermittent pulse, and rapid prostration.

TREATMENT.—Specific A.A. is the only and proper remedy, and may be given every half hour, and then every hour, as long as there is hope of a favorable termination. It will do all the good that any medicine can do.

Flukes, or Rottenness.

This term is applied to the condition caused by the presence of fluke worms (*fasciola hepatica*) in the liver or bile ducts, where they sometimes exist in large numbers, causing great swelling of the liver.

CAUSE.—The disease is chiefly developed in low districts, and after damp seasons. They even may be taken in with the food and developed in the liver.

SYMPTOMS.—Depression, sadness, inertness, loss of appetite; watery, red, yellowish, purulent eyes; yellowish tint of all parts not covered with hair; fœtid smell of nose and mouth; hard skin; dull, erect hair; irregularity of excrement, which is white, watery and fœtid.

TREATMENT.—The principal remedies are Specific A.A. at first, and then, after a day, alternate Specific C.C. with the A.A., a dose once in three or four hours.

Fall of the Rectum.

The protusion of the bowel is sometimes attendant upon diarrhea, dysentery or constipation, but it may occur by itself.

After reduction, it may be necessary to secure the bowel by sutures through the sphincter muscles.

The medical treatment consists in giving the Specific J.K., once or twice per day, which of itself generally prevents the recurrence of the prolapsus.

Hernia—Rupture.

The most frequent form of hernia among cattle is the *ventral;* and it is almost invariably the result of external violence. If the rupture be small, rapid in its growth, and cause acute pain, it is difficult of cure; if small, it may be easily strangulated, and become gangrenous. If the tumor be large and slow in growth, especially in young animals, it may be easily cured.

TREATMENT.—Hernia is of rare occurrence; but when it does occur, and admits of treatment, the best remedy is a pad, with bandages properly applied after the tumor has been reduced. Specific A.A. should be given if there is fever or disturbance of the system, after which Specific J.K. may be given at night with benefit.

CHAPTER IV.

DISEASES OF THE URINARY AND REPRODUCTIVE SYSTEMS.

Suppressed or Scanty Urination.

This is usually the result of some disease of the kidneys, or a mere symptom of other morbid condition, or it may arise from a paralytic condition of the bladder itself. This condition will generally be promptly relieved by giving a few doses of the SPECIFIC for SCANTY or SUPPRESSED URINATION, H.H., twenty drops, at intervals of four, six or twelve hours, according to the urgency of the case.

Inflammation of the Kidneys, Nephritis.

This disease has many symptoms in common with cystitis, or inflammation of the bladder, and its treatment scarcely differs. It occasionally occurs in cattle, and may be excited by blows upon the loins, calculi, or small stones formed in the kidneys, or by eating poisonous plants, or the use of strong allopathic medicines.

SYMPTOMS.—The animal brings the fore legs together, bends the back downward, and presses with pain when endeavoring to pass water; the loins are hot, more so than the remainder of the body, sometimes even burning. The rectum is hot, dung scanty and passed with pain. There is a great desire to pass water, but only a few drops escape,

which is at first limpid, then thick, and of a deep red color. The gait is stiff, appetite gone, no rumination, but great thirst.

TREATMENT.—Give the SPECIFIC for INFLAMED KIDNEYS, H.H., a dose of twenty drops, every two, three or four hours, according to the intensity of the disease. It will be found entirely sufficient.

Inflammation of the Bladder, Cystitis.

This disease is not so common in cattle as in horses, but may be occasioned by cold or injuries in the region of the loins. It is manifested by the following—

SYMPTOMS.—The animal constantly keeps the back arched; the walk is stiff, and the animal, when standing, leans against something on one side or the other; frequent effort to pass water, but to little purpose, as only a small quantity, of deep red color, is passed at a time. The bowels are bound, evacuations scanty and passed with pain. There is no appetite or rumination, but intense thirst; the eyes are prominent, and the countenance evinces great distress.

TREATMENT.—The SPECIFIC for INFLAMED BLADDER, H.H., will be found perfectly appropriate, and may be repeated, in doses of twenty drops, every three or four hours, until entire relief is experienced.

Hæmaturia—Discharge of Blood with the Urine.

The discharge of blood with the urine is more common in oxen than in other domesticated animals, and attacks males more than females; when the cow suffers, the milk has also a bloody appearance.

CAUSES.—Improper food; eating the buds of oak, fir, ash and other trees in spring; the grass of

marshy meadows; catarrh; sometimes a vesical calculus. Injuries inflicted upon the bladder at the time the animal calves.

SYMPTOMS.—Depression, loss of appetite, great thirst, little rumination, rapid pulse, cold ears, horns and feet; pain on pressure of the lumbar region. Rigors supervene; the mouth and tongue become hot and dry; the pulse becomes feeble and scarcely perceptible; evacuation from the bowels is painful and causes the animal to moan. At first the urine is not very red, but it becomes more so as the disorder advances; nor is the discharge at first very painful, though afterwards it becomes distressingly so, causing groaning as it comes away, drop by drop. By suitable homeopathic treatment, the course of these symptoms may be arrested and a cure be effected, otherwise the disease becomes chronic, the kidneys and bladder become inflamed, and death is inevitable.

TREATMENT.—This is a rare affection, and sometimes difficult to cure. Specific H.H. is the proper remedy. Give a dose, according to the urgency of the case, once in two or four hours, or even night and morning, in slight cases.

Gonorrhea, Bull-Burnt, Clap.

This disease is usually a consequence of diseased organs of the other sex, or it may be induced, in a modified degree, from want of cleanliness or from the irritation of repeated acts of coition.

If it arises from contact with the diseased organs of the male, it begins to manifest itself in from two to four days after connection; the first symptom is: being a peculiar side-motion of the tail, which is otherwise kept rather close over the fundament; the bearing is at first swelled and sore, afterwards much

more swollen, separated, and red on the inside; a mattery discharge, sometimes in considerable quantities, flows out; the urine is small in quantity, made very frequently and with much pain.

In the male the sheath is red and swelled; a constant discharge of matter issues from it; great pain and scalding attend the act of urinating, and the water is voided in small quantities and in a jerking manner.

TREATMENT.—The prepuce or sheath of the bull, or the bearing of the cow, should be cleansed and kept clean with tepid water and soap; after which the parts may be washed with THE MARVEL, or it may be injected, morning and night. Give, three times per day, twenty drops of the SPECIFIC for PAINFUL URINATION, H.H., and continue its use two or three times per day until cured. The Specific, H.H., will entirely control the disease, yet if time is important, we can hasten the cure by means of the MARVEL, as above indicated.

Spasm of the Bladder—Colic of the Bladder.

DEFINITION.—Spasmodic stricture of the sphineter of the bladder, causing involuntary retention of urine.

CAUSES.—Too watery food; too long retention of urine; suppression of perspiration; cold feet.

SYMPTOMS.—Great restlessness; unavailing attempts to void urine; the animal is in great suffering, scrapes with its feet, throws itself on the ground, then rises again.

DIAGNOSIS.—Spasm of the bladder is distinguished from colic by the retention of urine; but the fullness and distention of the bladder is observable on examination *per rectum*.

TREATMENT.—The Specific H.H. will be found efficient. Give a dose every hour until relieved.

Calculus.

Small vesical calculi enter the urethra at the time of urination, close the canal, and thus prevent the passage of urine.

Symptoms.—The general health of the animal is at first good; but in its endeavors to pass water, only a few drops flow. Then it becomes restless, stamps with its foot, looks at its flanks, strikes them with its tail, and keeps away from the manger. Ultimately, if the calculus be not passed, the bladder bursts, and the urine collects in the abdomen, giving the appearance of ascites. The animal returns to its fodder and water, but soon dies.

Treatment.—In general, the Specific H.H., for urinary diseases, will be efficient. Give a dose morning and at night. If the case is urgent, give a dose every hour, and then at longer intervals.

Red Water—Black Water.

In cows, this disease often follows calving, and chiefly occurs when north-easterly winds prevail, and in spring and autumn.

Causes.—This complaint is often caused by want of due care of the animal; bad hay in winter; noxious herbage of low, undrained, swampy lands; little grass and less water in summer; budding leaves in spring, and decayed leaves in autumn; a cow's being exposed to cold or wet too soon after calving; exposure to sudden alterations of the weather; diseases of the liver and stomach.

Pathology.—Veterinary surgeons now attribute this disorder to the absorption of vitiated bile, which, passing into the blood, deranges all the secretions and stains them; analysis of the urine and examination of the viscera support this view, for the liver is found to be enlarged, inflamed,

sometimes rotten; the gall-bladder distended with thick, dark bile; the kidneys yellowish-brown; the lungs, the serous fluid of the pericardium, the chyle in the lacteals, the skin, the conjunctiva, all yellow.

SYMPTOMS.—The early symptoms, namely, dullness, poor appetite, unthrifty appearance of the skin, tender loins—may pass unobserved, till the red urine attracts notice. At first the water may be but little colored, but as the disease progresses the color gets deeper, and may even become black. The general health becomes increasingly involved: there is total loss of appetite; the pulse is quick, full and abounding; the white of the eye, and every part of the skin that can be seen, are of a yellow-brownish color; at the first, the evacuations may be loose and watery, even dysenteric, followed by the most obstinate constipation; the animal rapidly loses flesh and strength; the eyes become sunken; and without proper treatment, death takes place, preceded in some cases by violent purging.

TREATMENT.—Give the SPECIFIC for FEVER, A.A., a dose of twenty drops, three or four times per day. Should the disease not yield within two or three days, the FEVER SPECIFIC may be alternated with that for SCANTY URINATION, H.H., twenty drops four times per day. The first mentioned Specific will, however, generally be found sufficient.

ACCESSORY TREATMENT.—Great attention should be paid to diet. This should consist of mashes, gruel, linseed tea, fresh meadow grass, or vetches in small quantities at a time; neither mangold nor turnips should be given, nor should water be allowed, except sparingly. Great care must be taken against cold. The animal should be kept sheltered from winds, but exercise may be taken in a suitable yard or shed. The beast, however, should not be turned out in a hot sun for two or three days after it is apparently well, or a relapse may ensue.

Parturition.

The natural period of gestation is about nine calendar months, or from 270 to 285 days; if longer, the calf is generally a bull. For a month or three weeks before the time of calving—or, if poorly in condition, two months—the cow should be allowed to dry; otherwise the unnourished calf will be of little value when it is born. If the cow be milked too long, there is also danger of bringing down the new milk and causing puerperal fever, or inflammation of the udder. On the other hand, a cow should not be fed too high. For some weeks, as the time approaches, the food should be limited in quantity, and be given more frequently, otherwise the rumen will be so distended with food or gas as to press upon the uterus, alter the position of the fœtus, and thus render parturition difficult.

Cows, when well attended to, calve very easily and require little assistance. For a few days there is a mucous discharge from the vagina; the animal is restless and uneasy; groans, and breathes more quickly; the udder rapidly enlarges; the abdomen drops. The cow should be allowed to be quiet; it is a cruel and dangerous practice to rouse and drive her about. The restlessness soon increases; the cow keeps getting up and lying down; at last she remains on the ground, and, if all goes well, the calf is soon born. The expulsive pains cause the exit of a considerable quantity of fluid, or of a pouch full of serum. When this pouch bursts, the pains increase and the calf is expelled. If there be any difficulty, the fœtus may be drawn forward during a pain. The cord breaks of itself, at some distance from the umbilicus. The *after-birth*, *cleansing*, or *placenta*, is not always passed at once; it may remain for several hours partly or wholly within the womb,

causing some danger of fatal consequences; but manual interference should not be allowed till the action of medicines has been found ineffectual for its removal.

TREATMENT. — The general treatment has been sufficiently indicated in the foregoing. If the labor be tedious, a dose of Specific A.A. will often help. After two hours, another dose might be given; and in some extreme cases, when the pains have nearly ceased, a dose of the Specific G.G. will often help.

The animal should be kept in a roomy, well-aired place, free from superfluous litter, covered immediately after calving if the least danger be apprehended; fed sparingly for some days, principally on mashes and small quantities of hay.

The udder should be frequently and well stripped of its contents.

Barrenness or Sterility in Mares, Cows or other Animals.

It is a common observation that some strains, more particularly of high bred animals, are uncertain as to their breeding capacities. This may arise from disease, or mere torpor of the ovaries, from too long repression of the natural function, or from excess of action resulting in casting off fecundating ovum. But it is a condition which can almost invariably be cured, and the natural function be restored, by the simple use of my VETERINARY SPECIFICS, and without result either to vulgar unscientific manipulations, or to hurtful or poisonous drugs. Thousands of valuable *mares*, *cows* and *other animals*, have by this simple method been restored, and their value increased many fold, not only as

breeders but in tone, spirit, activity and general worth, by this use of my VETERINARY SPECIFICS. This to those not initiated to the marvellous results of my discoveries, may seem incredible, but it is simply only doing again that which has so often been done, and may be again at a trifling cost repeated.

TREATMENT.—The simple giving of VETERINARY SPECIFIC G.G. daily, the usual dose, for a week or more before service, and then a dose every other day for two weeks after service, has been usually sucessful.

☞ But if the case is of *long standing*, or *obstinate*, use the SPECIAL VETERINARY SPECIFIC M.M. FOR STERILITY (see page 28*a*), as per directions, when required.

Cleaning after Calving.

In some cases, from torpidity of the calf-bed, the afterbirth is retained, which may result in very serious consequences.

A dose of twenty drops of the SPECIFIC for MISCARRIAGE, G.G., will soon cause its expulsion and the healthy cleaning of the animal. It may be repeated, at intervals of four hours, if necessary.

Flooding after Calving.

Some blood is necessarily lost after calving, and it is only when the amount is excessive or continues some time, or threatens to weaken or destroy the animal, that the term flooding can be applied to it. It may be occasioned by injuries received during the process of delivery, or from the calf-bed not sufficiently contracting from atony or want of vigor of that organ.

The symptoms need not be described; any continuous flowing from the bearing, before or after delivery, and especially after the passage of the cleansing, should receive medication.

TREATMENT.—The cow should be kept quiet and be permitted to lie down, and twenty drops of the SPECIFIC for HEMORRHAGE, G.G., be given every hour, or even every half hour, in urgent cases.

Cold injections, cold, wet cloths applied to the loins, or cold water poured upon the belly, are not necessary, and are not without danger.

Sore Teats.

The teats crack into sores, which become painful, and discharge, the contents mingling with the milk; the pain occasioned during milking renders the cow restive, and soon tends to make her vicious and to keep back her milk; garget, hence, is apt to arise from the milk remaining in the udder and causing irritation.

TREATMENT.—The VET. CURE OIL is sovereign for SORE TEATS. In bad cases, wash the teats carefully with warm water; and after drying with a soft cloth, apply the VET. CURE OIL, which repeat morning and night, simply oiling the sore places or cracks. Give also SPECIFIC I.I. morning and night; and after three or four days the Specific J.K., unless indeed the trouble has not been quite cured by the use of the SPECIFIC I.I. and the VET. CURE OIL.

Garget, or Inflammation of the Udder.

This is most liable to arise after the first calving, and may be traced to exposure to cold and damp, especially if the cow is in good condition, or from not milking the cow clean, so that the milk remains and causes irritation, or, in some cases, the bag may be wounded by lying upon it.

SYMPTOMS.—A portion of the bag becomes hot, painful and swollen; then hard lumps or "cakes" can be felt in the teats, or in one portion of the bag; other parts of it become affected in the same way; the pulse is full, quick and hard; breathing is quickened; the mouth and horns hot; bowels bound, and other symptoms of fever are present. If the disease is allowed to go on, the fever becomes more severe; the cow does not eat or chew the cud; the swelling, previously hard, becomes soft from the formation of matter; the milk becomes mixed with matter, and, in some cases, with blood. If the disease is not arrested or matter is not let out, it will spread, making its way slowly to the skin, through which it at last bursts, leaving deep, long ulcers, which heal with difficulty, and in many cases a portion of the udder is lost, as regards its power to produce milk. If this result is avoided by judicious treatment, some hardness may remain, which requires time to remove.

TREATMENT.—Keep the udder well milked out, and give the SPECIFIC A.A. in alternation with SPECIFIC C.C., and apply the VETERINARY CURE OIL. This will generally disperse the heat, hardness and inflammation. But should suppuration have come on, and the abscess point showing a soft spot, lance it, and continue SPECIFIC C.C., morning and night.

Dropping after Calving—Milk Fever—Puerperal Fever.

This disease is of frequent occurrence and quite liable to be fatal, unless under proper homeopathic treatment. It is much more prevalent some seasons than others, owing, doubtless, to peculiar atmospheric conditions. and is more malignant some seasons than others. The ordinary methods of treatment—purging and bleeding, etc.—does more

harm than good, and few cows survive the double infliction of dosing and disease combined. The proper use of the Homeopathic Specifics, however, rarely fails to restore, even in the worst cases.

There are certain causes which predispose to this disease; thus fat, stall-fed cows are more liable to it than poor or lean ones; the complaint is more common in the variable weather of early spring and late fall; a cow once having the disease is more liable to a return than others. The exciting causes are: exposure to cold and wet; driving the cow a long journey too soon; giving too much or too rich food soon after calving.

Symptoms.—This fever begins shortly after calving, usually within twenty-four hours; if three or four days pass over, the cow may be considered safe from an attack. The earlier symptoms are: the cow refuses her food or only eats a little of it; she is depressed, hangs her head and looks dull; the horns are hot; the nose, instead of being damp with healthy dew, becomes hot and dry; the urine is scanty; the bowels are confined, or, if moved, the dung is hard and lumpy; the pulse is quicker and fuller than in health; the breathing is quickened and attended with heaving at the flanks.

To these warning symptoms are added, with more or less rapidity, the more formidable ones, which are often first to attract the attention of the owner. The milk is reduced in quantity or entirely stopped; the eyes glisten and look bright and staring; the white of the eye is covered with numerous red streaks, or is of a leaden color; the eye-balls are thrust forward in their sockets, and give the cow a somewhat wild and anxious expression; the hind legs seem weak, and are separated a little from each other; she appears to stand uneasily upon them,

resting for a time on one foot and then changing to the other; this paddling and shifting from one leg to another continues as the difficulty of standing increases, until the animal supports herself by leaning against the stall; she does not chew the cud; all discharge from the bearing is stopped; the calf is neglected; the pulse becomes slower than before, and the breathing more difficult; the udder is hard and swelled, and little or no milk can be drawn from it; gradually becoming worse, the weakness in the hind legs increases, so they can no longer support her, she staggers and sways about, falling, at length, heavily on the ground; she struggles, tries to rise again, and may or may not succeed, but in either case soon loses the power of rising, and lies helpless upon the ground. In this stage of the complaint the symptoms vary. In some cases we have the following: The cow tosses her head from side to side, writhes her body and lashes her tail, struggles, stretches out her hind legs, moans and bellows, and seems to suffer great pain. The breathing is also difficult and labored; the skin covered with clammy sweat; the paunch enormously swollen from accumulated gas. Unless this swelling subsides, the breathing becomes more difficult and labored; the pulse more rapid and oppressed, so as scarcely to be counted; the legs very cold; pain is worse; fetid gas rises from the stomach, and death ensues.

In other cases the foregoing symptoms are absent, or exist only in a slight degree; and we have the following: The cow lies stretched out at full length on her side, or her head is brought to the opposite side, with the nose towards the shoulder and the chin on the ground; or the head is twisted directly backward, with the nose held out and the horns upon the shoulder, in the most awkward manner.

The eyes are dim and glassy; the pupils are dilated, rounded, and do not contract at the approach of light; the ears drop; the mouth is partly open; the lower jaw drops if the head is raised; she has not the power to hold up the head; she has lost the sense of feeling, and can scarcely swallow, if at all; difficult, rattling breathing; pulse weak, slow and intermittent, or even imperceptible; horns, legs and surface cold and chilly; swelling of the belly increases; udder swelled, hard and sometimes red on the outside; in some cases dung and urine suppressed. All these symptoms become worse by degrees, and unless relieved, death ensues generally within two days from the attack, sometimes in a few hours.

TREATMENT.—The symptoms of this disease appear so suddenly, and run so rapid a course, that if the disease is prevailing, or there is reason from any cause to apprehend it, the cow should be watched about the time of calving, and a dose or two, of fifteen drops, of the FEVER SPECIFIC, A.A., should be given soon after. This will act as a preventive, and arrest any premonitions of the disease, and we would counsel its continuance; at least an occasional dose, morning and night, for two or three days. It will favor the early and feverless production of milk and prevent the formation of fever.

Should the disease have made its appearance with evident fever, unequal warmth, bloating, suppressed discharge from the bearing, etc., give the SPECIFIC for FEVER, A.A., a dose of twenty drops, every two or three hours, until the disease is arrested. This remedy is the appropriate specific for all the stages and forms of this disease, and requires only its faithful employment to relieve and cure even the most formidable cases.

Only in the last extremity, with labored breathing, extreme bloating, and entire loss or rapid failure of strength, the SPECIFIC I.I. may be

alternated with the FEVER SPECIFIC, A.A., at intervals of two hours, in doses of twenty drops, until the system rallies, when the two medicines may be continued at longer intervals.

NURSING AND CARE.—The cow should be placed in a clean, roomy stall, so as to be allowed to rise and to be attended with facility; laid on clean, dry straw, no dung allowed to remain, and be comfortably clothed, according to the season. The milk should be frequently drawn off and the udder hand-rubbed. She should lie with the fore part of her body higher than the hinder part, or on a level, with her legs under her in a natural position. She must be on her side and supported by bundles of straw, and on no account be allowed to lie out full stretched, in which position she will become worse and surely die. Small quantities of warm gruel are best for food.

Abortion or Slinking.

The natural period of calving is two hundred and eighty-five days after conception; if it occurs before this period, it is termed an abortion. A cow is most liable to abort between the fifth and eighth month. At some seasons, from causes not fully explained, but supposed to be atmospheric, cows are very liable to slink their calves, and when it occurs in a herd, it is very liable to extend to others, and may become very general, unless proper measures are taken to arrest it.

Aside from the endemic or epidemic causes adverted to, the more common occasions of slinking are: blows, falls, strains, severe exertions and injuries, or other forcible or violent movements; severe illness, such as consumption, hoove, inflammation of the bowels, especially if caused by eating grass

covered with hoar-frost; eating herbs which grow in low, marshy places; drinking water impregnated with iron; intercourse with the bull during pregnancy; exposure to foul smells arising from decayed animal matter, especially if it be the cleansing of a cow that has just slunk; over-fed cows are more liable to miscarry than those in moderate condition; suddenly placing a lean, starved cow upon a rich pasture, or a fat cow upon poor food; fright may produce it.

But perhaps the most common and prolific cause of abortion in cattle, is the use of the varied forms of ERGOT found in RYE, CORN; and sometimes in *hay or dried grass.* It appears in rye as the SPURED RYE or ERGOT; and in corn as the SMUT CORN, or black fungus, Ustilago maydis, (maize smut;) and in grass as a minute fungus. These forms of ergot are more abundant in over damp or rainy seasons. The CORN SMUT in black bunches, often of a nut or fist size may be noticed in the fall in every corn-field. Eaten by cows it causes, running watery eyes, sore mouth, and falling out of the teeth, disease of the hoofs and feet, and most assuredly *abortion.* The threshing machine is a fearful distributor of the ergot of rye and wheat, breaking up the spurs and scattering the spores through the entire mass, so that a stack of smutty straw is a prolific source of infection. The danger from MAIZE SMUT may be avoided by going through the corn-field and carefully cutting and placing in a basket the smut ears and then burning them. If thrown on a heap they ripen into millions of spores, to be carried everywhere by the wind to ripen in any plant that will harbor them. If sore mouth or watery eyes is noticed in a cow or herd you may

conclude that they have been poisoned with maize smut, and are in danger of miscarriage. A cow who has once aborted is quite liable to do so again, and should be treated accordingly.

SYMPTOMS.—The indications which should warn an owner that his cow is about to miscarry are often unnoticed, unless he is observing. They are as follows: Dullness; loss of spirits; watery eyes; want of appetite; loss of cud; more or less completely of arrested secretion of milk; hollow flanks; enlargement of the lower part of the belly; and of the bag; staggering whilst walking; disinclination to move, both when standing up and when lying down; the movements of the calf, previously vigorous, become less frequent, and soon cease; the breathing is labored and quickened; a yellowish discharge comes from the bearing; the belly continues to fall; the cow is feverish and moans occasionally; the calf-bed contracts at last and expells the calf, which is usually dead, or dies in a short time.

TREATMENT.—Place the cow by herself in a well aired, quiet stable; food should be light and sloppy; fat cows should not be fed on rich and stimulating food, while lean ones should receive that which is more nourishing. If the calf is dead, the sooner it passes off the better; and it should be deeply buried, away from the cattle or herd.

Give fifteen drops of the SPECIFIC for MISCARRIAGE, G.G., every six hours, and the dose may be repeated two or three or more times should the threatening symptoms continue after the first or even second dose has expended its action.

This interval should elapse between doses, as too rapid ones may even defeat the object, by over-

excitement of the system, while a single dose often arrests a miscarriage if permitted to expend its action.

If a cow has previously miscarried, she should have, every few days, along about the time when it may be expected, a dose of the SPECIFIC G.G., as a preventive; or, if slinking prevails in a herd or in the neighborhood, a dose of SPECIFIC G.G., for MISCARRIAGE, given say twice per week, will arrest its progress and prevent miscarriage.

Falling and Protrusion of the Womb.

After a difficult labor, or when manual help has been injudiciously applied, the womb may be everted or turned inside out. The organ then is partly or quite protruded and appears as a deep red mass covered with smooth red bodies (glands).

In order to replace, the cow should be placed with the hind feet higher than the fore feet, the hand of the operator should be wrapped with a soft cloth soaked in warm milk and smeared with the VETERINARY CURE OIL and *gentle pressure* should be *continuously and carefully* applied to the mass until it gradually returns to its proper position. Dry or inflamed parts should be washed in warm milk and kept well anointed with the VETERINARY CURE OIL. Give also SPECIFIC A.A. at first every three hours, and later alternate SPECIFIC G.G. with the A.A. a dose once in six hours, which continue until cured.

Where CASES of SIMPLE PROTRUSION OF THE ORGAN occur without retroversion, give SPECIFIC A.A. morning and SPECIFIC G.G. at night, feeding light easily digested food, which will be effective.

CHAPTER V.

DISEASES OF THE SKIN.

Chaps—Cracks.

CAUSES.—Chaps and cracks in the skin are sometimes symptomatic of internal disease, and should be treated in connection with the primary disorder, they are also due to long walking on marshy ground, and sometimes to the application of strong caustics.

TREATMENT.—In general, Specific I.I., for eruptions, will only be required, one dose morning and night; also, if the chaps are deep or sore, apply the VET. CURE OIL daily.

Eruptions.

Eruptions may be due to some constitutional disease, but they may also arise from insufficient, improper or excessive food; or from certain insanitary or atmospheric conditions. Sometimes they are local, sometimes general, about the body; in some cases easily cured, in others inveterate. They appear in a great variety of forms—as spots, pustules, vesicles, tubercules, scabs and scales.

TREATMENT.—Specific I.I., for eruptions, is the proper remedy for all forms of eruptions, and it is usually sufficient to give a dose morning and night. If, however, the eruption is the result of a surfeit, too rich, too abundant, or over-gorging with food, the Specific J.K. will be appropriate at first, or may be given in alternation with the Specific I.I., one in the morning, the other at night. Should there be sore, rough or scaly places, apply daily, also, the VET. CURE OIL.

Fungus.

Fungoid excrescences are apt to arise in different parts of the body. They may be due to the pressure of the yoke in draught oxen, to the friction of the cord at the base of the horns; they may occur about the hoof. Sometimes they form suppurating abscesses; sometimes they are of an intense red color.

TREATMENT.—Give, morning and night, a dose of Specific I.I.; also apply daily the VET. CURE OIL.

Sponge.

This term is given to a round, spongy excrescence on the knee, generally caused by some external injury. It is at first a hot, painful swelling; then becomes a cold, hard, indolent tumor. It sometimes occasions considerable itching, and emits purulent matter.

TREATMENT.—Give from the first, and all along, a dose of the Specific I.I., morning and night, or even, in the more indolent cases, once per day, and anoint the tumor daily with the VET. CURE OIL.

Goitre.

This unsightly tumor is an enlargement of the gland on the side of the neck—generally the left side; it is sometimes acute, sometimes chronic, and obliges the beast to carry its head upward and outward. When acute, it is very painful, the attendant cough is distressing, and the animal bellows hoarsely, with evident suffering.

TREATMENT.—During the acute stage, and when the tumor is inflamed, sore or painful, give the Specific A.A. three or four times per day. Older and chronic cases require Specific I.I., for eruptions, morning and night, and the tumor should have occasionally an anointing with the VET. CURE OIL.

CHAPTER VI.

MECHANICAL INJURIES.

Burns.

Injury to the skin and sub-cutaneous tissue by any hot body requires careful treatment, not only because of the local damage, but also because of possible injury to the system.

The air must be excluded as much as possible; and the less the injured part is disturbed the better. It will be found advantageous to apply one piece of linen, smeared with the VET. CURE OIL, next to the wound, so that it may not be necessary to remove it; then over that a piece of several thicknesses, which may be removed for the purpose of applying the oil. Often the part may be so situated that the plaster or covering cannot be conveniently kept in place; then the only application will be the VET. CURE OIL, simply applied with the end of the finger, so as to keep the sore or burned place moist. Slight superficial burns require only the application of the oil as above. During the healing, simply apply the oil and the cure will be perfect.

Give, also, for extensive burns, or deep burns, or scalds, the Specific A.A., every two or three hours at first, then morning and at night. In extreme cases, or with extensive ulcerations, give Specific I.I., in alternation with Specific A.A., after the first fever has subsided.

Contusion—Bruise.

Is defined as an injury inflicted on the surface of the body by mechanical violence, without laceration of the skin. It may be slight, involving only the rupture of minute vessels, or it may tear the muscular fibres, or wound a large blood vessel.

CAUSES.—Blows from sticks; butts from horns; pressure of the yoke on draught oxen.

TREATMENT.—For slight affections of this kind, in the nature of a bruise, simply apply the MARVEL OF HEALING, or rub the part with the VETERINARY CURE OIL. If this is not at hand, use a dilution of ARNICA, in the proportion of a spoonful of the tincture to a bowl of water. Bathe the part with either of these, three or four times per day, and as often give a dose of the Specific B.B. This will soonest remove the lameness and stiffness and restore the part, as well as ward off injurious consequences. The administration of the Specific B.B. should never be omitted in these cases.

Sprain.

These injuries affect the ligaments that connect the joints, and are caused by false steps, slipping, or by forcibly twisting or contorting the joints to an extent beyond that permitted by the natural limitations of flexion.

Sprains happen to various members—the coronet joint, the fetlock, the shoulder, etc. The pain, swelling and inflammation which accompany these accidents are proportioned to the extent of the injury.

GENERAL TREATMENT.—This consists in affording rest to the limb, mitigating the pain and subduing inflammatory action. Also apply to the part, when you know where it is, the MARVEL OF HEALING, but in all such cases give the Specific B.B., for strains, lameness, etc., a dose at first four times per day, and later morning and night.

Sprain of the Shoulder.

Draught oxen are particularly subject to this affection, which is caused by excessive exertion in drawing, false steps, slips or external violence.

SYMPTOMS.—There is heat, pain, stiffness and imperfect mobility of the limb; the animal trails it with evident pain; does not raise it easily over any obstacle; when standing, rests the weight of the body on the opposite side.

TREATMENT.—Give the animal rest, and a dose of the Specific B.B., three times per day.

Sprain of the Haunch.

Inability to move the hind quarters and extremities is due to the same causes as sprain of the shoulder.

SYMPTOMS.—Limping, and dragging the hind legs; when standing, the beast keeps them apart. In severe cases it can neither stand nor walk, but falls down, unable to rise. Sometimes the lumbar region is hot, swollen and painful.

TREATMENT.—The same as for other sprains. Give a dose of Specific B.B., three times per day.

Sprain of the Loins.

The causes, symptoms and treatment of this affection are much the same as for sprain of the haunch.

OTHER MEANS.—In some sprains it will be advisable to precede the medicinal treatment by fomentations with warm water, and afterwards to dry the parts with a cloth before applying the MARVEL or VET. CURE OIL. After the swelling has subsided, the animal may only very gradually return to its accustomed work. Give, always, a dose of Specific B.B., morning and night, or even three times per day.

Choking.

Foreign bodies in the œsophagus—obstruction of the gullet. Roots that have not been cut into small pieces before they are given to the cattle are sometimes swallowed, especially if the beasts be very hungry. There is no doubt about the symptoms, as the body may often be felt externally, while difficulty of breathing, and violent action of the muscles of deglutition, with a view to expel the intruder, indicate what is the matter. Prompt action is necessary, as the animal, if not relieved, becomes hooven or wind blown.

Treatment.—If the obstruction be near the top of the gullet, it may be removed by the hand put through the mouth and protected by a common balling-iron.

Try also pouring some oil or thin grease into the gullet through a horn inserted into the mouth.

A pinch or small spoonful of coarse gun-powder put far back *under the animal's tongue*, will often cause a violent regurgitation or vomiting, which brings up the offending substance.

Give also Specific F.F., every half hour, if the animal is bloated or distressed with wind, or the Specific J.K., if suffering from indigestion.

If it be too far down the œsophagus for removal in this manner, the obstruction must be pushed into the stomach. For this purpose a probang must be carefully used. A good, common probang, which will not lacerate the gullet, may be readily made from a piece of firm rope, from half-inch to an inch in diameter and four or five feet long. Wind the end of this from two or three inches down to near the end with firm, strong twine, so as to make a firm square, not pointed end. Secure the twine carefully in the strands, so it will not unravel, or

yet better, wind the ends of the cord along in the strands of the rope to the handle. Then smear the bulb and rope with lard, and pass the probang down to the obstruction, and, using it like a ram-rod, drawing it back but a few inches at a stroke, you can readily drive down the obstruction, without danger of lacerating the gullet, as you are in great danger of doing by using a "rakestail" or other piece of stiff wood, causing the death of the patient.

Wounds.

Animals are often exposed to wounds, which differ in character and importance, according to the manner in which they have been produced, the extent of the injury, and the part wounded.

Incised Wounds are produced by instruments with sharp edges; these wounds have no jagged edges, and heal most rapidly.

Stab Wounds may not appear very considerable on the surface, but may be very serious, as important parts may have been injured. If a bowel has been cut, blood is generally discharged from the anus, or the contents of the bowel escape through the external wound. If the parts around a stab wound soon begin to swell, blood-vessels and intestines have probably been injured, and extravasation of blood takes place.

Lacerated Wounds are caused by rough and blunt bodies, have a jagged and uneven appearance, and, although large and important blood-vessels have been divided, in general there is but little bleeding.

Treatment.—If dirt, wood, glass, sand, shot, or any other substance have got into the wound, remove them by a sponge and cold water; in some cases a

syringe may be required for this purpose. If there is much bleeding, this must be arrested by using a sponge dipped in cold water, or with the MARVEL or VET. CURE OIL, and gently pressed upon the wound. If *arteries* have been severed, they will have to be grasped with a pair of forceps, and drawn slightly and gently forward, so that they may be securely tied by means of a strong ligature of silk. You may know an artery has been injured by the blood being bright red and coming in spurts. The healing of *cut-wounds* is facilitated by bringing the edges together by means of adhesive plaster, or by stitching them. Before sewing up a wound, the bleeding should have ceased, and the operator must be careful that all foreign bodies, loose shreds of tissue, and clots of blood are carefully removed; otherwise inflammation will be produced, and the stitches will have to be removed. The sides of the wound should first be placed closely together, as before injury; each thread should be tied by itself, so that if one stitch breaks out, others may remain undisturbed. Well-waxed silk or strong thread should be used, and as many stitches inserted as may be necessary to unite the edges of the wound.

Give Specific A.A. and apply the VET. CURE OIL in all cases of injury.

Caries of the Bones.

SYMPTOMS.—Swelling of the bones; great tenderness to the touch; frequently a suppurating wound. The disease is very serious, and very difficult to cure.

TREATMENT.—You may give the Specific J.K. each morning, and the Specific I.I. at night, with advantage.

Fractures.

HORNS.

When a cow breaks a horn there is considerable hemorrhage, which should be arrested by fomentations of THE MARVEL OF HEALING, or the ARNICA lotion. If the horn be warm, it is just possible to restore it by immediately putting it in its place and fixing it there with bandages. The animal should then be tied up to a ring, by itself, so that it cannot rub against anything. The stump, or replaced horn, should be wrapped in cloths after being well covered with VET. CURE OIL. Specific B.B. should be given internally, once or twice per day.

BONES.

The *ossa ilium*, or flank bones, are most liable to fracture.

TREATMENT.—In fractures, wherever situated, it is indispensable to keep the part at rest as much as possible; consequently most fractures incidental to cattle admit of no efficatious treatment. In simple fractures, where the proper splints and bandages can be applied, recovery may ensue.

Poisonous Plants.

Cattle sometimes eat poisonous plants, such as acrid buds of oak, twigs of yew, the water hemlock, and others, and consequently suffer and die. Unless it is known that they have had access to such plants, it is not always easy to determine the nature of the disorder from which they are suffering. If there be suspicion of poisoning, the following treatment may be pursued, when the symptoms seem to indicate it.

SYMPTOMS.—Torpor; refusal of food; excessive thirst; distention; the animal shows signs of great agony, grinds its teeth, stamps, paws the ground, strikes its flanks, rolls on the ground, as if with spasms or colic. Sometimes there is great fury, ending in torpor, paralysis, death.

TREATMENT.—The stomach-pump should be employed; water thrown into the rumen till vomiting ensues. This should be repeated till the stomach is emptied.

In general, however, and unless the animal be very valuable and the circumstances favorable, such means are not available, and you can only give the Specifics F.F. and J.K., in alternation, one dose every half hour, or hour, according to the urgency of the case.

PART III.

DISEASES OF SHEEP.

When a number of Sheep, or a flock, are to receive medicine, the best and most economical, as well as efficient method, is as follows: Procure a new or perfectly clean pint bottle and cork, fill it two-thirds full of pure water, to which add a *large spoonful, or sixty drops*, of the proper specific, SHAKE IT THOROUGHLY, so as to perfectly medicate the whole mass. Of this, a dessert spoonful is a dose for a sheep. Paste a proper label on the bottle and use it only for that specific, so as to prevent mistake or confusion.

CHAPTER I.

DISEASES OF THE BLOOD.

Anthrax Fever.

Known as *Black-Leg, Quarter Ill*, or the *Black Spauld* of the English Shepherds, or as one of the "Murrains" of this country. It affects young and thrifty sheep, and is rarely found in old and poor stock. It is most common in wet seasons, in the early spring or summer and fall, and when the feed is very luxuriant. The sheep gorge themselves with the rich vegetation, and the digestion being over-taxed, the system is disorganized and the sheep suddenly droop and die. On examination, the wool

leaves the skin at the slightest touch, and the body is found to be swollen and blackened in large patches, chiefly on the hind or fore quarter. Air is infiltrated under the skin, and the carcas seems already decomposed and full of black blood. On examining the flock, some will be lame or limping, the eyes red, and the mouth and tongue inflamed and blistered, and on passing the hand over the sides or quarters, they will be found swollen, the wool readily coming off, and a crepitation be heard from the confined air beneath. The urine is dark, the bowels constipated and dung bloody. After a time the animal is unable to stand, and falls upon the side; stretches out the limbs and in a few hours is dead.

The disease is worse on moist, rich bottom lands, and is rare on dry hills or gravelly soils. To prevent the disease, such soils and localities should be avoided, and the sudden changes from poor to such rich and succulent and abundant pasturage.

The SPECIFIC F.F. is the proper remedy, and may be given in doses of five drops to the worst cases every four hours, and to the ailing ones two or three times per day. In the very worst cases, the SPECIFIC I.I. may be alternated with the F.F. every three hours.

Aphthæ, or Foot and Mouth Disease.

This disease has prevailed extensively in Europe among flocks and herds, and been at times a most sad visitation. It is more rare in this country, but yet has been known in various sections, and we have no assurance but that under peculiar favoring circumstances it may prevail again, so that its symptoms and treatment should be known.

It is a blood poisoning, and is highly contagious under favoring circumstances. It affects sheep, cattle, pigs and rabbits.

The most characteristic appearance is the eruption of watery blisters upon the lips and tongue, and between and around the hoofs. The earlier symptoms are shivering, succeeded by fever, cough and increased pulse. Then there is failing appetite, tenderness over the loins, slavering from the mouth and grinding of the jaws. Blisters, large and small, appear on the mouth and tongue, which break and become raw sores, with evident suffering. The feet are swollen and covered with blisters, which break and become sores, causing the animal to walk with difficulty, shake the feet, kick or lie down. If the disease progresses, the sheep rapidly lose condition from inability to eat or move about; all the symptoms increase; the hoofs are sloughed off, and even the bones of the feet, leaving only a stump, and ewes in lamb abort.

In favorable cases the symptoms abate gradually, and the disease runs its course in from ten to fifteen days. Animals have it but once.

TREATMENT.—In violent epizootics, it is safest to stamp it out by the slaughter and deep burial of every animal affected, and the removal of those that are well from the affected locality. In any event, the affected sheep should at once be separated from the flock, and placed in comfortable quarters, where they can be conveniently tended. The Specific I.I. may be given, in doses of five drops, three or four times per day. Prepare in water, as noted for Anthrax Fever.

The feet should be washed with soap and water, and then with a weak solution of (coperas) sulphate of copper (1 ounce to a bucket of water), and then

dressed with the VET. CURE OIL, and bound up to keep out dirt.

Aphthæ or Thrush.

Thrush is very frequently connected with foot-rot, either as a symptom or a result. It is manifested by the animal refusing to eat the customary food; dullness; the cud is not chewed; frothy, stringy saliva flows from the mouth, which is found, on examination, covered with small blisters, and the animal grows thin and poor.

TREATMENT.—A few doses of the SPECIFIC for DISTEMPER, C.C., given morning and night, will promptly cure. Five drops in water are sufficient for a dose.

Red Water.

This disease is mostly known in the west and south-west, and is doubtless the result of exposure and unwholesome food. It is apt to appear in the late fall or early winter, when sheep have their feed covered with hoar-frost, or are obliged to scrape the snow from it, thus eating large quantities of snow and ice, thus producing a peculiar inflammation of the bowels, or from drinking foul water. Not unfrequently quite a proportion of a flock are suddenly attacked.

The sheep appear dull and stupid, and stagger, carrying their head on one side; the eyes are staring, and they are sometimes blind. The bowels are obstinately costive, and death ensues in a few hours. After death, the belly of the sheep is found filled with reddish serum.

The Specific A.A. is the remedy, and may be given, a dose of five drops, every two, three or four hours, according to circumstances.

Braxy.

The term "Braxy," derived from "broc," or "brac," merely signifies sickness or disease, and is therefore indefinite. There is dry braxy, which is inflammation of the mucous membrane of the stomach and bowels, enteritis; dumb braxy, or dysentery; water braxy, or inflammation of the serous membranes of the abdomen, peritonitis. Braxy proper is a form of anthrax, a disorder of the blood, called by the French *sang de rate.*

Causes.—Excessive eating, especially of rich, fattening food. The sheep may have a change from poor to luxuriant herbage, or be over-fed when being got forward for the market, or eat to repletion—particularly about the time of full moon—without lying down to rest and ruminate.

Symptoms.—The early symptoms can rarely be observed, for the disease is so rapid in its course that the animal often suddenly trembles, falls down and dies. If opportunity occur, the following may be noted: The sheep appears weak and depressed, leaves the flock, nibbles a little grass, staggers, trembles all over, often lies on the ground unable to rise; if raised, appears to be paralyzed in the hind quarters, walks slowly, staggers, stops and falls again. The eyes are languid, bloodshot and watery, then filled with viscid mucous; there is also a yellowish discharge from the nose; the mouth is red and hot, the breathing difficult, the pulse full, strong and frequent, the body hot, the urine scanty and bloody, the dung dry, hard and small in quantity, the wool clapped, and sometimes there are inflammatory pustules in different parts of the body.

Treatment.—Specific A.A. should be given every hour in severe cases, until there is some improvement,

when the intervals may be lengthened, and the Specific I.I. should then be given in alternation with the A.A. The I.I. should also be given as a preventive when the disease is in the neighborhood, a dose two or three times a week.

If early symptoms be observed, the progress of the disease may be sometimes prevented by causing the animal to trot about, or run down hill. The effect of this exercise is that the circulation of the blood is increased, the action of the skin promoted, and other excretions are stimulated; the stagnation of the system is thus counteracted. But more effective yet is a dose of Specific I.I.

Rot—Cachexia Aquosa—Fluke Disease.

Rot is a most destructive disease, the most so of any known to shepherds, and ravages the flocks all over the world. It has been known from the earliest times, but of late years has attracted more attention, both on account of the increase of scientific investigations. Mr. Youatt estimates that in England more than a million sheep and lambs die yearly from this disease. In the winter of 1830–31 this number was more than doubled. In 1860 the disease was very virulent in the southern part of England. The mortality in 1862 exceeded that of 1860. It has not been so generally prevalent or so fatal in the United States as in the old countries; yet it is sufficiently so to demand attention and to be a source of dread and loss in some sections of our very extended sheep breeding regions.

Causes.—Rot is a disease of low, boggy or marshy districts and wet seasons. On sandy soils, dry hillsides and well-drained land it is rarely developed. Sheep are free from danger on the banks of flowing

streams or large sheets of water; but if the bed of the stream be nearly dry, or the water be drained from its bed and the ooze and decaying vegetable matter give out their miasmatic exhalations, the sheep that graze near the banks are sure to be attacked. If pasture land be flooded, and the subsoil prevent the rapid subsidence of the water, rendering the surface moist and exhalent of vegetable matters in a state of decomposition, sheep turned on the land will be attacked with rot. The action of the sun and air on any miry land, whether of wide or limited extent, where water lodges for a time or permanently, where vegetable decomposition is going on, evolves putresence, which causes the disease. When the ground is hard with frost, and no evaporation is going on, the sheep are free; but as soon as the thaw comes the danger recurs. The land on which the sheep are fed may be sufficiently drained for ordinary purposes, but if the water lie on it after rain, forming shallow puddles, the miasma that arises will surely affect the sheep. Rot, then, is the effect of miasmatic exhalations. It has also ensued from eating food of bad quality, or soft, watery grass, and from pneumonia badly treated.

The disease is most prevalent from June to October.

Symptoms.—Sometimes the course of the disease is rapid; but generally it appears insidiously, progresses slowly, and may last from two to four, or even six months. At first there is some difficulty in recognizing the malady, for the sheep feeds and even gains flesh, lays on fat, and promises well for the market; but a practiced eye will detect early symptoms in a slow walk, shaking head and depressed ears. Inactivity and dullness are soon apparent; the animal lingers behind the flock, and

may be seized without resistance. The skin, especially on the brisket, is found to be of a pale yellow, instead of a clear pink tint, appears puffed, and retains the impression of the finger; the eye is dull, watery, its vessels appear to be infected with a yellow fluid, the carbuncle is also yellow, instead of red; the eyelids are swollen; the lips, gums and palate are pale; these are unquestionable signs of rot. After a short time the animal begins to lose flesh, the flanks become hollow, the back rigid, the eyes, muzzle and tongue decidedly yellow, the breath very offensive; the wool changes color, loses brightness, falls off in patches, or is removed with the slightest force, and sometimes flakes of skin come away with it. Here and there livid spots or patches appear on the skin, which hangs loose and flabby; the flesh, instead of feeling firm and healthy, is soft, and emits a crackling sound when handled or pressed on the ribs. The urine is scanty and highly colored; the dung soft; sometimes there is excessive diarrhea, sometimes the bowels cease to act. By degrees the animal loses appetite, but, as in other dropsical diseases, there is insatiable thirst; rumination ceases; tears flow abundantly; the nostrils are full of viscid mucous; the abdomen then becomes enlarged by the constant progress of ascites, and dropsical swellings appear in different parts of the body; on the upper region of the neck, and on the lower part of the jaw, there often appears a singular formation—when the animal is said to be chockered—consisting of a soft, indolent tumor, which seems to be larger when the sheep returns from grazing, disappears during the night, but returns in the day, and gradually becomes larger. The pulse is frequent and very weak, and anæmic murmurs of the heart may be heard; the

breathing is quick and short; the animal remains constantly lying down, is weak, listless, trembling, wasted to a skeleton, and dies in a hectis condition.

After death, the whole of the cellular tissue is found to be infiltrated with yellow serous fluid; the muscular tissue is soft, flabby and pale, as if it had been soaked in water; the blood is pale and deficient in fibrin; the fat is fluid; the belly is often filled with serous fluid or purulent matter; the peritoneum thickened; the bowels adherent to each other, yellowish and distended with gases; the mesenteric glands enlarged and infiltrated with yellowish serum; the kidneys and lungs pale, flaccid and infiltrated; the heart enlarged; in fact, all the tissues and internal organs of the body are more or less implicated. But the principal changes are found in the liver, it is always extensively diseased, enlarged, often indurated and ulcerated; the whole tissue seems to be disintegrated, for it breaks with the slightest pressure, and on being boiled, almost dissolves away. It is usually pale in color, but sometimes spotted and speckled. In the liver, and especially in the bile ducts, there are large numbers of flukes (*distoma hepaticum*); in some cases they are so numerous in the ducts as to cause dilatation; these flukes are also found in other parts of the system. The consequence is that the function of the liver is utterly deranged, the bile is secreted in excess and permeates the system, all the organs are involved, and the animal dies a mass of disease—rotten.

TREATMENT.—Obviously the first step is to remove the sheep from damp to dry quarters; to change the diet from succulent food to good hay, oat-meal, corn-meal, pease, beans or other nutritious grain. A full supply of rock-salt should be within reach of the animal. Give the Specific I.I. from the first

and all along, two or three times per day. In some cases, where the disease seems to be more in the nose and head, the Specific C.C. may be substituted for the I.I. with advantage, or the two may be given alternately, the one morning, the other at night.

Simple Fever.

Like horned cattle, sheep are liable to attacks of fever, and from the same causes. The symptoms are also the same—languor, dullness, refusal of food, thirst, retirement to rest alone, apart from the flock, in a cool or sheltered place; the pulse is quick, the breathing hurried, the eye red, the mouth dry. The disorder of which these are the symptoms soon turns to inflammatory fever, or some vital organ becomes inflamed, and the animal will be lost. Many sheep, and more lambs, are lost every year by inattention to the first symptoms of simple fever.

TREATMENT.—Specific A.A. will afford relief if given in time; after the fever subsides, give Specific J.K.

Inflammatory Fever.

This fever is similar to the inflammatory fever, or quarter-ill, of cattle, is consequent on a change from scanty fare to luxuriant pasture, commences with the symptoms of simple fever, and pursues its course as described in the section on this disease in the cow. The treatment, with Specific A.A., a dose three times per day, as there prescribed, should be pursued. The animal should be kept in a state of complete rest in a shaded and cool place, with only a little green fodder to eat. In order to prevent the invasion of inflammatory fever, the sheep should not be penned in close folds, nor exposed much to the sun, especially at noon, nor taken too long a distance, nor made to walk quickly.

CHAPTER II.

DISEASES OF THE NERVOUS SYSTEM.

Encephalitis, Inflammation of the Brain.

This disease may arise from internal causes, but more frequently from sun-stroke, blows upon the head, too plentiful food, etc.

SYMPTOMS.—The animal ceases to eat; hangs its ears and head, which are hot to the touch; walks along staggering, unconscious whither it goes; the eyes are bright and red and projected from the head; the air it expires is hot; the breathing short, rapid and accompanied with violent beating of the flanks; it remains lying down, head stretched on the ground, and, as the disease draws to a close, it ends in convulsions.

TREATMENT.—Give the FEVER SPECIFIC, A.A., a dose of three or five drops every hour, during the height of the disease, and then at longer intervals as the case improves.

Hydrocephalus—Water in the Head.

In lambs there is not unfrequently an accumulation of serous fluid on the surface of the brain, or within the brain itself. It is not due, like sturdy, to the presence of hydatids in the brain, but is usually congenital and due to constitutional weakness. The course of the disease is more rapid than in the case of sturdy; it is also often accompanied by paralysis of the hind quarters. When the lamb is born with it, the head is large, the bones soft, the

sutures open; and the parturition being difficult, the lamb must be sacrificed for the safety of the ewe. In other cases the disorder appears gradually, the lamb staggers a little, the appetite is sometimes defective, sometimes excessive; the bowels now constipated, then relaxed; the skull enlarged; the animal pines, loses flesh, and finally dies. The best means of prevention are to change the stock, so as to introduce more healthy blood into the constitution of the flock, and to attend to the safety and welfare of the ewes at the lambing season. Specific I.I. may be given with benefit, a dose daily.

Apoplexy.

In consequence of that phethora, which is the result of over-feeding in fattening, sheep are quite liable to apoplexy, and when in this condition they are driven rapidly some distance in warm weather, they are quite liable to a fit of this disease.

SYMPTOMS.—Generally there are some symptoms which indicate that an animal is about to have a fit of this very frequent complaint. These are: Dullness; frequent standing still, or remaining behind the others; the breathing is quickened; it seems sleepy and unaware of what is going on around; the eyes appear as if they were blind; the pupils are reddened and nostrils dilated; pulse is quick and hard; the membranes of the nose and eyes are red; then, from standing fixed as it were in one place, it staggers and falls; then is violently convulsed, and, unless relieved, death speedily ensues.

TREATMENT.—The SPECIFIC for FEVER, A.A., if given before the convulsion, a dose of three or five drops, will arrest its farther progress.

If the fit has taken place, give the medicine at once, and repeat the dose again after the animal gets over it, should it survive the fit.

Paralysis—Palsy.

Paralysis in the sheep is due to the same causes as in the cow, or horse. Reference should be made to sections on the diseases in those animals. Complete palsy is incurable. Partial palsy may be relieved, but rheumatism often supervenes. Friction and warm gruel often prove restorative. Gradual rather than speedy recovery is to be sought. Specific I.I. will prove most effectual, a dose morning and night.

Hydro-Rachitis—Louping Ill.

In some of the grazing districts of Scotland this disorder is prevalent, while other localities are exempt from it.

Professor Murray, of Cirencester, who made observations on it in 1862, states that: at first "the animal falls down and struggles convulsively; paralysis has not yet set in, but the functions of the nervous system are disordered, the limbs are no longer subject to the control of the will, but plunge about convulsively. At the same time, the appetite is generally depraved and excessive, unnatural things being eaten." Paralysis quickly ensues, chiefly of the hind limbs; or there is staggering, with weakness of the fore or hind legs, and soon all control over the limbs is lost; the animal being thus obliged to lie down, is unable to obtain food, becomes weak and emaciated, and dies in the course of a few days; or, if the disorder becomes chronic, in a few months.

The malady appears to be due to the coarse grasses and water peculiar to the soil of particular neighborhoods, as its appearance and disappearance have been coincident with changes in the cultivation. The principal existing causes are want of suitable food, cold, and wet.

TREATMENT.—Change of diet and careful housing, and A.A., then J.K., are required. Give the A.A. at first, say two doses, at intervals of six hours; then give the Specific J.K., and continue the two *in alternation*. If the paralysis is obstinate, substitute the Specific I.I. for the A.A., and keep on for the paralysis with Specifics J.K. and I.I., three or four times per day.

Tetanus.

This disorder, which is fully described with reference to cattle, is not so unmanageable in the sheep as in the horse or cow. If yearning ewes and young lambs are sufficiently sheltered from cold, sleety rains and severe weather, one common cause may be averted. So, also, may another in connection with the castration of the lambs, if the operation be carefully, instead of roughly, performed, and if at the time the jaws be prevented from contracting by introducing a thumb into the jaws, or forcing open the jaws if the muscles be contracted. Specific J.K. may be given with benefit, two or three times per day, or better Specific T.T. which cures Tetanus.

Epilepsy—Fits.

In sheep, this disorder frequently occurs on a fine, cold morning in spring, early summer and autumn, within an hour or two of daybreak. On rising from its bed, the animal stares, staggers, falls, struggles convulsively for a few minutes, kicks, rolls its eyes, grinds its teeth, foams at the mouth, and sometimes involuntarily voids dung and urine. After a few minutes, or perhaps half an hour, the fit subsides, the animal rises, seems semi-conscious, presently begins to eat, and appears to be in good health. These fits may occur daily, and then will soon

become fatal; or, by occasional repetition, they may wear away the creature's flesh and strength.

TREATMENT.—A few doses of Specific A.A. on the day of attack, followed by a dose of A.A. each morning, and of J.K. each night, are the proper remedies. A change of pasture and shelter should be provided. (See also on epilepsy in the horse.)

Rabies—Hydrophobia—Madness.

When a mad dog has entered a fold, it is often difficult to determine which sheep have been bitten and which remain untouched. Careful examination, one by one, should be made; still uncertainty remains. The symptoms appear from two to ten or twelve weeks after attack, and are similar to those which appear in other animals. The sheep annoy and chase each other, cease to feed, lose flesh, are restless, and manifest strong and unnatural sexual desire. Ewes become stupefied and paralyzed, and die, often without a struggle. Lambs have convulsive fits, terminated by death. Rams and wethers butt their heads against the ground, palings, banks and one another; running full tilt, with great violence and frequency, so as to tear the skin from their foreheads. There is no attempt to bite anything, and no instance is known of any person having been bitten by a mad sheep.

TREATMENT.—Specific A.A. should be given every day, to all the flock, for a few days, then once a week for several weeks. If the sheep have not been clipped, the wounds will be about the face, lips, ears and legs, for the wool defends the body; but after clipping, all parts of the body may be bitten. The treatment of the wounds as prescribed with reference to cows should be pursued.

Dizziness, Staggers, Sturdy, Turn-Sick, Gid.

This is a very dangerous and not infrequent disease, almost exclusively confined to wool-bearing animals. It is most common in wet, marshy places, and among lambs under a year old. Its immediate cause is the presence of a small worm, inclosed in a hydatid or sack of fluid, and located either within the substances of the brain, or beneath the bones of the cranium. These hydatids vary in size, number and position, being found on the right or left side, indicated by the animal turning to the right or left, or in the center of the median line, in which case it may turn to either side, or not at all, the animal carrying the head down. When the hydatid occupies the back of the head, the animal holds the head high, and runs straight forward, throwing itself on any object it meets.

Symptoms.—As above indicated, the symptoms consist of various forms of turning, whirling around or standing still, etc. At first, when the hydatids are small, there may be but little or nothing to indicate their presence; but as they grow larger, they press upon the bone, and even enlarge or remove a great portion of it. One side of the head may be enormously enlarged, or the bone become quite thin, so that the situation of the cyst may be thus known, and sometimes a small hole may be discerned. The sacks are more frequently on the left side.

The first effects are: dullness, loss of spirits; they chew the cud slowly and carelessly; they keep aloof from the other sheep; they stagger when walking; stand before a pool of water looking into it, and sometimes tumble in and are drowned; sometimes when eating they appear as if frightened, and run

over the field as if pursued; the head is held higher or lower, or carried on one side; the body, in moving, inclines to the same side; the eyes have a peculiar bluish color; the sheep appear to wander about, and gradually lose flesh and strength; then they begin to turn round and round to one side; seem quite unconscious of everything around them; the round and round movements increase until they are almost constant, and the animal at length dies.

TREATMENT.—The old school methods of treatment avail nothing for this disease. Puncturing through the skull into these cysts, when their presence is known by the swelling, is sometimes successful if the precise point is known and no other exists. But Homeopathic treatment has been successful. Give the SPECIFIC for FEVER and CONVULSIONS, A.A., a dose of two or five drops every night at first, and then at longer intervals, and the symptoms from these parasites sometimes disappear.

In obstinate cases, give Specifics A.A. and C.C., alternately, every four hours, may be tried. But the general rule is to slaughter the very decided cases.

CHAPTER III.

DISEASES OF THE ORGANS OF RESPIRATION.

Coryza—Cold in the Head.

The inflammation of the mucous membrane causes sneezing, flow of watery and thin mattery discharge from the nose. The causes and symptoms are similar to those of catarrh. (See following section, and section on choryza in the cow.)

TREATMENT.—SPECIFIC C.C., for CATARRH, is the proper remedy, and may be given two or three times per day; the affected animals should be kept from others, as the disease is sometimes contagious.

Catarrh—Hoose—Common Cold.

The causes, symptoms and treatment of this disorder are so fully considered in the sections which refer to it in relation to the horse and cow, that further description is unnecessary. Specific C.C. is the proper remedy, unless there is considerable heat and fever, in which case the Specific A.A. should be first given.

Sheep are particularly liable to it in the autumn; after wet weather, they are too frequently neglected; but they should be led to a dry, sheltered place for the night. Catarrh, however slight, should receive prompt attention, as it is the precursor of serious and fatal diseases.

Cough.

This is usually a symptom of some primary disorder, on the cure of which it will disappear. It may, however, be a passing irritation, due to causes mentioned with reference to cough in cattle. A persistent cough is suggestive of serious ailment, and, without delay, give the Specific E.E. and you may save the animal.

Laryngitis.

Laryngitis, or inflammation of the lining membrane of the windpipe, is due to cold, changable weather, etc. It is distinguished from bronchitis (see next section) by a characteristic *ring* in the cough. The open mouth, with outstretched head, indicates difficulty of breathing and a sense of suffocation. This frequently ensues from thickening of the membrane and closure of the *rima glottidis*, or entrance to the windpipe. Specific A.A., a dose two or three times per day, is the treatment. (See section on the same disease in the horse.)

Bronchitis—Bronchitis from Worms.

The *wheezing* cough which accompanies this disease is characteristic of inflammation of the bronchial tubes. For information respecting other symptoms, and the treatment required, reference should be made to the sections on these disorders in the cow. Specific A.A., in alternation with Specific D.D., will generally be effective, A.A. morning, and D.D. at night.

Strangles.

This term is applied to inflammation and suppuration of the salivary glands. It is not of frequent occurrence in sheep; but when it appears, it is

attended with feverish symptoms, swelling under the lower jaw, the formation of tumors, which tend to suppuration. For the further consideration of this disorder, and for directions for its treatment, reference should be made to the section on strangles in the horse. Specific C.C. is the proper remedy, and may be given a dose morning and night.

Black Muzzle—Black Mouth.

This complaint, though sometimes observed in sheep, is most common among lambs. It consists of scabby eruptions about the muzzle, eyes and ears, which occasionally extend over the whole face.

Specific I.I., given internally, will generally effect a speedy cure. The VET. CURE OIL may be applied externally while the Specific is given internally, in severe cases.

Pneumonia—Inflammation of the Lungs.

This disease may be caused by exposure to cold and wet; too severe weather; sudden changes of weather; cold nights and mornings and hot middays, are apt to induce it.

SYMPTOMS.—Want of appetite; loss of the cud; dull, staring eyes; ears are hung down; the head is held up; the mouth open; breathing quick, labored and difficult, with heaving of the flanks; grating of the teeth; inside of the nose and white of the eyes much reddened; a discharge, at first thin and watery, afterwards mattery and offensive, flows from the nostrils; frequent painful cough, attended with rattling in the throat. These symptoms gradually become more and more severe, until the animal dies.

TREATMENT.—The SPECIFIC for FEVER, A.A., will generally be found sufficient. Give a dose of five drops every two hours. Should the disease not yield in a day or two, the SPECIFIC for INFLAMED LUNGS, E.E., in doses of five drops, may be alternated with the A.A., every three hours.

Phthisis—Consumption.

What has been said respecting this disorder in cattle, is applicable to the same in sheep. Specific E.E. is the remedy in such cases, a dose morning and night.

CHAPTER IV.

DISEASES OF THE ORGANS OF DIGESTION.

Hooven, Fog, Blast, Blown.

This disease is usually occasioned from eating clover, turnips, etc.

SYMPTOMS.—The whole belly is much enlarged; the swelling is most manifest at the flanks and on the left side; the swelling is elastic, and gives a hollow sound when struck; the breathing is much impeded and very difficult; the sheep does not eat; appears drowsy and sleepy; at last it becomes unconscious, and then dies.

TREATMENT.—The SPECIFIC for WIND BLOWN, F.F., is perfectly appropriate, and may be repeated every hour until relieved. Five drops may be given as a dose.

Colic—Gripes.

This disease is not common in sheep; but lambs over-fed with milk, or with relishing herbs, or pastured in rank or acrid grass, are subject to it. It should not be confounded with enteritis; for the distinguishing symptoms of which see section on enteritis in the cow. For treatment, see section on colic in cattle. SPECIFIC F.F., for COLIC, will afford prompt relief.

Enteritis, Inflammation of the Bowels.

This disease is manifested by the following symptoms: Violent and constant pain in the bowels, producing at first uneasiness, and then rolling about on the ground; the sheep almost constantly getting up and lying down again; it sometimes lies on its back, the ground is pawed, the belly struck with the hind feet, etc. These symptoms of pain are attended with confined bowels, quick pulse, cold legs and nose; the belly is tender when pressed upon, and the sheep becomes much reduced in flesh and strength.

TREATMENT.—The SPECIFIC for FEVER, A.A., is the appropriate remedy for this disease, and may be given, five drops every one, two or three hours, according to the urgency of the disease.

In cases of extreme distress it may be alternated with the SPECIFIC for COLIC, F.F., at intervals of a half hour or hour, until relieved. But usually the first-named Specific will be quite sufficient.

Diarrhea.

Purging is most common in spring, and is then occasioned by fresh grass, to which the flock are unaccustomed; lambs are subject to a severe and often fatal form of this complaint, caused by the irritation of grass eaten for the first time. In some instances it may be occasioned by cold or by a peculiar irritation of the mother's milk.

SYMPTOMS.—The disease is manifested by discharge of various colors, and sometimes very profuse. It is accompanied with loss of appetite and wasting of flesh.

TREATMENT.—If the discharge is merely the effort of nature to rid the system of some hurtful substance, it will require no interference. But if it is excessive or wasting, three or five drops of the SPECIFIC for DIARRHEA, F.F., given morning and night, will usually be sufficient to arrest the disease.

Dysentery, or Flux.

Diarrhea not unfrequently ends in this form of disease; it is also the result of peculiar atmospheric changes, such as a long term of warm weather abruptly terminating in damp cold; or it may be produced by using fodder spoiled by excessive moisture.

Symptoms.—At the commencement there are the usual manifestations of fever, such as dullness, loss of appetite, thirsty dry mouth, increased frequency of pulse, etc. To these are added pain in the belly; frequent attempts to dung, followed by an abundant discharge of slime, mixed with small pieces of hard dung; this slime is exceedingly sticky, and adheres to the parts, often binding the tail over the passage, and quite obstructing it; after the discharge has lasted some time, the animal wastes rapidly until it becomes a skeleton, and the loss of strength is rapid and extreme; the discharge at last becomes black, mixed with blood, and highly offensive, until the sheep dies, worn out by the excessive drain.

Treatment.—The animal should be removed from the causes which have induced the disease; the slime must be removed from the tail and thighs with warm water and soap, and sand or fine earth sprinkled on to prevent further adhesion. Give the Specific for Dysentery, F.F., five drops three times per day.

Hepatitis—Inflammation of the Liver.

Sheep are particularly liable to inflammation of the liver, both acute and chronic. The organ is naturally large in proportion to the size of the animal, and appears to possess a special tendency to inflammation and morbid action. The disease is not only of itself frequently fatal, but also leads to the most destructive pestilence that afflicts sheep—the rot; sometimes it appears as an epidemic.

The causes of this condition of the liver are not certainly known, but they are associated with feeding on damp, marshy meadows, or land that has been for some time under water; from all of which there are exhalations of the miasm of decaying vegetable matter. *Saline* marshes, however, do not yield the morbific exhalation. Excess of nourishing food sometimes produces inflammation.

The symptoms of acute hepatitis are: fever, dullness, hanging of the head, unwillingness to move, heaving at the flanks, constipation. The skin is yellow; so, also, are the eyes, especially the carbuncle or small glandular body in the corner of the eye. The right fore leg is lame, and pressure on the right side of the body causes pain. The disorder may run a rapid course, or may become chronic; the liver may thereupon become disorganized, and rot may ensue.

Further information respecting this disorder and its treatment are given in the sections on hepatitis in the horse and cow. The treatment consists of the administration of the SPECIFIC for FEVER and INFLAMMATIONS, A.A., of which a dose may be given three or four times per day, with generally favorable results.

☞NEPHRITIS, or Inflammation of the Kidneys; HÆMATURIA, or Discharge of Blood with the Urine; DIABETES, or Saccharine Urine, and SORE TEATS, are fully described in the sections referring to these disorders in cattle, to which the reader is directed.

Splenitis—Inflammation of the Spleen or Milt.

This disorder is of more frequent occurrence than is usually suspected, but it is generally difficult to detect. The symptoms and treatment are given in

the section on splenitis in the cow. Fortunately the treatment in Specific Homeopathy is not difficult. The Specific A.A. should be given, a dose once in three or four hours, or at least three times per day.

Constipation.

In this disorder, which may be primary or symptomatic, the bowels are "bound," and the dung is hard and dry. J.K. is the chief remedy; but reference should be made to the section on constipation in the horse.

Dropsy.

Is known as the accumulation of water or serous fluid in the abdomen. It is usually the result of inflammation of the peritoneum or lining membrane of the abdomen. It may be known by the large and pendulous condition of the belly, and by percussing or striking one part of the belly, while the other hand is held against another part, when, if water is present, the fluctuation is easily perceived. It is caused by any exposure or food that will produce the original inflammation.

TREATMENT.—Give five drops of the SPECIFIC, H.H., for DROPSY, three times per day.

Founder.

Sheep are occasionally foundered from similar causes which produce it in other animals. It is manifested by the following symptoms: It walks slowly; head depressed; has no sprightliness; poor appetite, but great thirst. After a time this slowness of walking becomes a rigidity, so that it requires great effort for the animal to lie down or get up again. The appetite diminishes and thirst increases. In the more advanced stages, the eyelids are swollen,

the eyes more or less inflamed, and the feet extremely hot; still farther advanced, there is no appetite, feet are burning and hot, the animal is in so much pain from movement that it will only walk to satisfy its raging thirst. It drags itself along often on its knees rather than walk. It moans and groans, there is severe fever, short breathing, and severe beating of the flanks.

TREATMENT.—The SPECIFIC for FOUNDER, B.B., will be sufficient in usual cases. Give three drops three times per day, or morning and night if the case is not urgent. If there is heat or fever, the Specific A.A. may be given as an intermediate remedy.

Worms.

The presence of intestinal parasites in lambs is indicated by diminution of rumination, disorder of digestion, wasting away about the loins, distention of the abdomen, obstruction of the nostrils with purulent mucous. Specific D.D. is the proper remedy, and leaves but little to be desired, giving a dose once per day for a time, afterwards recurring to it again if a new crop should appear. (For further information, see sections on worms in other parts of this work.

Anorexia—Loss of Appetite.

Among the disorders of the cow, there is sufficient detail for the treatment of this affection. Specific J.K. will generally correct it.

CHAPTER V.

DISEASES OF THE ORGANS OF GENERATION.

Abortion—Miscarriage.

Ewes frequently abort. Sometimes this tendency is so great as to assume the appearance of an epidemic, affecting, more or less, almost the entire flock. The causes are various, some of them very contrary. Abortion may arise from debility, or when a cold winter succeeds a wet summer and autumn. It is also produced by continued intercourse with the ram after the period of gestation is considerably advanced; by incautious and hasty driving during the latter period of pregnancy, or by sudden fright from a dog. Abortion is seldom fatal to the ewe.

The principal and only remedy required is the Specific G.G. When the ewes of an entire flock manifest a tendency to abort, a few doses of Specific G.G. may be given to each animal once a day, with confidence in arresting the blight. If abortion fairly commences, Specific G.G. should be administered every eight or six hours. (See also on abortion in the cow, pp. .)

Milk Fever—Puerperal Fever.

This disorder, to which ewes are subject after dropping their lambs, is much dreaded by the sheep master. Its causes, symptoms and treatment may be gathered from a full description of the disease in the cow, which see on pp.

The Specific remedy is the A.A., whose use three or four times per day leaves nothing to be desired.

Inflammation of the Bearing.

By this term is indicated a common affection of the ewe during the lambing season, which is generally produced by injuries inflicted upon the parts of generation in forcibly extracting the lamb from the mother. The pudenda swell considerable, are hot and painful and sometimes attended with discharge of an unhealthy character.

The parts should be well washed with tepid water, and the VET. CURE OIL applied. Specific A.A. should also be given internally, two or three times a day; in some cases, alternated with Specific I.I.

Garget—Inflammation of the Udder.

Garget is a disease which prevails amongst ewes during the lambing season. It arises generally from the action of cold and wet upon the udder. Lying with the udder in contact with the cold, wet ground will produce garget; also prevalence of wet and easterly winds.

The udder swells considerably, is excessively tender, and speedily becomes hard and hot; the pulse rises; the appetite fails, and more or less fever is present. The progress of the disorder is very rapid, and often fatal; prompt treatment is consequently required. The animal must be removed to a warm, sheltered situation, free from wet and cold. The best remedy is the Veterinary Specific A.A. It is the more demanded if the pulse is much disturbed, and the patient feverish, and a dose should be given three or four times a day. The lamb must be allowed to suck, or the udder must be otherwise emptied of its contents. As the fever abates, the doses may be given less frequently, say only morning and night. If hardness remains after the free use of the above remedies, a few doses of Specific I.I. may be given. If suppuration supervenes, the same remedy will be effectual. (The section on garget in the cow may also be consulted.

CHAPTER VI.

DISEASES OF LOCOMOTION AND SKIN.

Rheumatism.

Sheep, particularly aged sheep and lambs, are subject to rheumatism, sometimes acute, sometimes chronic. They move stiffly, as if in pain, look thin and miserable. The symptoms and treatment are the same as those for the same disease in oxen. In old sheep, only partial relief can be given; they should therefore be fed under shelter, ready for slaughter; if left to graze, they may not feed at all. Lambs should be sheltered and kept warm. Specific B.B. is the proper and very useful remedy, given daily.

Lameness.

A sheep frequently manifests sudden lameness; when it does so, the foot should be washed and examined. If there be a stone, thorn, or other foreign substance in the cleft, it should be removed, and the wound dressed with the VET. CURE OIL. For other causes of lameness, see sections on foot-rot, rheumatism, and on different forms of lameness in other animals.

Swelling of the Joints—Leg Evil.

This disorder is due to inflammation of the ligaments and cartilages of the joints, generally of the knees, sometimes of the fetlock and hock. Young lambs are subject to it. It arises from cold and

damp. The symptoms are: swelling, heat, stiffness, and great painfulness of the joint, and general disturbance of the system. These increase until the animal can no longer move about or raise itself; the joint swells, ulcerates, and discharges purulent matter; confirmed lameness, if not death, ensues.

The lamb should be sheltered, the limb fomented, and the affected joint bandaged with the VET. CURE OIL. SPECIFIC A.A. will relieve feverish symptoms. If ulceration ensue, SPECIFIC I.I. should be given, a dose morning and night.

Foot-Rot.

This disease is most common in low, marshy places, and results from foreign bodies, such as sand, gravel, sticks, or dirt getting into the cleft of the foot.

SYMPTOMS.—Lameness, swelling of the pastern, pain, etc.; matter then forms, and unless it is let out, it will spread in all directions under the foot and appear at the coronet; long, narrow ulcers remain, and proud flesh springs up from the diseased places.

TREATMENT.—Examine the foot carefully; remove all dirt or other foreign matter; then foment the foot night and morning with hot water for an hour, and then apply a turnip or bran poultice; the hoof should be pared down, and all the dead parts, or those likely to interfere with the escape of matter, cut away; afterwards apply the VET. CURE OIL on a piece of cloth, bandaged to the foot, to keep it in place and prevent dirt or other matter getting into the sore. If the parts are healthy, the tar and tallow application (equal parts) is very serviceable. The hoof will then begin to grow, during which care must be taken to prevent dirt lodging in the wound

and causing fresh irritation. A dose of the SPECIFIC for ULCERS, I.I., every morning, and of J.K., for condition, every night, will aid the process.

Pock.

This disease, which attacks the same animal but once in life, and by preference the young ones of the flock, is one which sometimes occasions fearful ravages among sheep. It has its regular stages, like the small-pox, and may be mild or malignant.

SYMPTOMS.—In the mild form, the animal is for two or three days sad and dejected; then, on different parts, more particularly on the inner surface of the fore feet and around the mouth, small red spots appear, whose center is occupied by a pimple, terminating in a white point. This stage of eruption is attended with feverish shiverings, heat, especially of the ears and nose; redness of the eyes and inner mouth; the animal is melancholy; head down; feet close together; lameness, especially of hind parts; no appetite or cud. The greater the number of pustules, the worse the disease. The body is hot; breathing short; a clear mucous flows from the mouth; the parts occupied with pimples, especially the head, swell so that the animal cannot open its eyes or mouth; the fever continues; the pustules enlarge, and are filled with fluid, first thin, and then becoming thick, yellow and purulent. On the thirteenth day the pustules begin to dry up, fever abates, pus hardens in the pustules, becomes yellow, then darker, flatten, become scabs, and by degrees fall off, leaving a dry scar behind. The drying stage lasts from five to seven days.

Sometimes this disease assumes a malignant form, in which the pock are very numerous, running together; the symptoms violent, irregular, and the

pock soon becomes dark-colored. The pustules run together, forming extensive ulcers beneath the wool, frequently destroying the eyes and entire pieces of the lips and face.

TREATMENT.—During the feverish stage, for the first five or six days give the SPECIFIC for FEVER, A.A., five drops four times per day. Then give the SPECIFIC for ERUPTIONS, I.I., the same dose morning and night, until the animal is well. This Specific, I.I., given to the well sheep, will so act as to either prevent their having it at all, or only in a very mild form. The sound and diseased, or suspected sheep, should be separated, as the disease is very contagious, and easily communicated.

If, however, the disease has appeared in a flock with some severity, inoculation is best, quickest and safest. This may be done on the forearm or other part, with matter from a fresh pock, merely dipping the lancet in it and inserting it just beneath the skin, not so as to cause the blood to flow, or it may wash it out. The advantage is, that all have it lightly, and get over it in three weeks, otherwise the flock may be six months having it; and not one per cent of inoculated animals will die. During the disease they should not be kept too warm or be over-fed.

Mange or Itch.

This disease is quite common among sheep, more especially when large numbers are kept together, as in the great sheep-raising centres like Texas, Kansas, Nebraska, etc. It is especially liable to occur in long continued bleak, rainy or moist weather, when flocks are long exposed from insufficient shelter. It is also favored by irregular feed, and by bad water; at first it appears in the form of small pimples, and then vesicles or blisters arise upon the reddened

skin, which secrete a sticky glutinous fluid; and in places these vesicles run into corroding ulcers or sores, which extend more and more, attended with violent itching and burning. The wool comes off, exposing raw or scabby patches, and the animal pines away and grows thin under the continued irritation. The disease is caused and is communicated by a minute *acaras* or itch-like insect, the destruction of which, with its larve or eggs, cures the disease. It is said to be about the only disease to which this animal in the great sheep-raising regions of this country are subject.

TREATMENT.—When practicable, the infected sheep should be separated from the flock, given a clean, dry, sheltered case, with good feed and careful attendance, and to all unsound or suspected ones, two or three drops of ERUPTION SPECIFIC, I.I., repeating the dose every three or five days.

The method of cure pursued in the large western sheep ranches and found to be entirely successful, is to give the entire flock a bath of LIME and SULPHUR, repeating the operation after six or ten days. A long tank is prepared, and placed over a fire-box half buried in the earth and then filled in the proportion of 25 pounds of Sulphur to 100 of Lime, filling the caldron from time to time with water. This is boiled for half an hour, then let off into a narrow tank four feet deep and sunk in the earth, extending from one sheep-pen to another, with the further end sloping gradually up, so as to enable the sheep to walk out after the bath. After cooling, dip in the sheep so as to thoroughly wet the skin.

Gadfly.

The gadfly of the sheep (*œstrus ovus*), allied to the gadfly of cattle (*œstrus bovinus*), is the plague of the flocks in August and September, as the other

is of the herds; but it chooses a different place for the deposition of its eggs. The locality selected is the *alæ*, or flaps of the nostrils of the healthiest and finest sheep of the flock, while they are sleeping in the pasture. There the eggs, warm and moist, are speedily hatched. Thence the larvæ, ascending the nasal cavity, travel to the frontal sinuses, where they remain, living on the mucous secreted there, until their metamorphosis. During their course upward they irritate the delicate membrane with their hooklets; and when they return from their hiding place for expulsion from the nostrils in the following spring, the irritation is renewed. The irritation, and consequent inflammation, pain and sense of dizziness, drive the sheep to distraction. The animal stamps, throws up his head, sneezes violently, and repeats the expulsive effort until the larvæ come away with a large quantity of mucous. The number of larvæ is usually not large; but when it is considerable, the inflammation may turn to gangrene and cause death. After expulsion, the larvæ bury themselves in the ground, assume the pupa state, in two or three months come out as gadflies, and again torment the sheep.

The treatment of this affection by means of powders blown up the nostrils, is often as irritating and injurious as the presence of the larvæ. Specific I.I. should be given internally. The inhalation of fumes of sulphur will cause sneezing; and if the larvæ be not already dead, they should be destroyed.

Louse—Tick.

The sheep louse (*trichodecta sphœrocephalus*) and sheep tick (*molophagus ovinus*) often infest the fleece and torment the animal. The latter is said to be very tenacious of life, and will remain in a

fleece a year after it is shorn. It is abundant in the thick fleeces of ewes in spring, whence it passes to the lambs, choosing the weaker lambs, and, by sucking their blood, making them still weaker. Washing with soap and water is of no use; ewes should be dipped before they are shorn, and lambs should also be dipped when they are troubled. A free bath (as described for mange on page 347) of the SULPHUR and LIME is at once the most ready and thoroughly satisfactory method of cure.

Fly.

Sheep that are wounded by butting each other, or any other cause, that have sores, that are dirty about the tail and quarters, are attacked by a large blow-fly, which deposits its eggs in the wound or putresence. It is during the summer, in sultry weather and after rain that the fly is the most troublesome. After a while the eggs are hatched, and the maggots burrow in the flesh of the animal. Their presence is indicated by local swelling, pain and dejection, and ultimate debility of the animal. If the maggots are not promptly destroyed and the wound kept clean, suppuration, deep ulcerations and death ensue. Mercurial applications poison the sheep as well as the maggots. The best treatment is to remove the maggots and keep the wounds clean, and apply HUMPHREYS' VET. CURE OIL or diluted *Carbolic Acid.*

PART IV.

DISEASES OF SWINE—HOGS

It is not always easy to administer medicine to swine, especially if they are old, or wild or intractable. But, fortunately, they only rarely require medicine, and my Specific treatment requires but rare or infrequent doses, and the medicines are of the kind proper to be taken in suitable, inviting food; so that the treatment under this system is far more simple and ready than under any other.

The dose for a full grown hog is twenty drops, half as much for shotes, and one fourth as much or five drops for pigs. It may be given with the MEDICATOR as prescribed on page 338, if the animal is ill, and quietly lying on the side, as sick hogs often are; or from the spoon it may be quietly turned into the mouth, if possible onto the tongue.

But in other and most cases, the animal is yet able to drink and comes to the trough on call. In such cases, turn out the half teaspoonful (a teaspoonful is thirty drops) which put into a cup of inviting, sweet milk, *stir it well with the spoon* and let them take it, after which give other food.

When several hogs are to have the same medicine, the most ready and convenient way is to procure a perfectly clean bottle, holding say four, eight or sixteen ounces, and put in a teaspoonful of the Specific for each five hogs, and an ounce of water for each, and *shake the whole thoroughly* for several minutes, and then mix the same with milk or other *clean, sweet food*, which feed as required.

☞Experience teaches that THOROUGH MIXING, or subdividing of particles, intensifies the effect and so compensates for quantity.

Hog Cholera.

A peculiar and very destructive disease, popularly known as HOG CHOLERA, has, from time to time, appeared in all the great pork-raising sections of the United States during the last few years. Its ravages have been so extensive, and the destruction of swine have been so great, that not only have individual veterinary men given much time and attention to its investigation and treatment, but the Legislatures of several States have also designated committees to report upon it with a view to its possible arrest. From these authorized statements and investigations, as well as from private information, we are enabled to form a clear idea of the several forms of the disease, and of their proper method of treatment.

The name hog cholera is not well chosen, as it conveys an erroneous impression of the disease, which has little or nothing of the nature of cholera about it, except, perhaps, its epizootic character.

It is essentially an "*anthrax*" disease, with tendency to rapid decomposition of blood and disorganization of tissue, and in whatever form it may be manifested, this characteristic is apparent. The symptoms are not only not always the same, but are widely different at different seasons, and in different localities, and even in different individuals in the same locality; so that we must not always expect to meet with the same train of symptoms.

VARIOUS CAUSES have been mentioned, all of which may be summed up in unwholesome conditions of life—in food, drink and surroundings—to which is subsequently added an epizootic influence.

Among the exciting causes are: KEEPING MANY HOGS IN CLOSE OR NARROW QUARTERS: some are thus

over-laid or over-heated, and then suddenly chilled while feeding; the disease rarely or never appears when one or two hogs are kept together; FEEDING SWINE ON THE GROUND, IN THE MUD, or in troughs where mud and filth is of necessity eaten with the food; as this condition always causes typhus among people, so it will cause blood poisoning or septic disease among swine. TOO RAPID CHANGE OF FOOD, as from poor feed to good feed, or from good to very good feed, the consequence being that the excretory organs, the liver, kidneys, lungs, glands and skin fail to carry off the proper amount of effete or decomposed matter, which hence accumulates, occasioning this poisoning of the blood which constitutes the disease. It is from hence that young shotes are most subject to it, and that it is most fatal among them, and hence most common among swine that have been taken up in the fall and put suddenly upon very rich, heavy feed, before the system has become accustomed to the change. This also explains why it is that the most vigorous and thrifty are attacked, while the poorer ones are generally exempt. OVER-HEATING by exposing the herd to very hot sun without shade, or exposing to cold, chilly, rainy weather without shelter, or, worse than either, permitting them to over-heat or over-lay each other in straw stacks or similar close quarters, from which, reeking with heat, they become chilled by coming out into the bleak wind to feed. Such exposure is almost sure to result in congestion and inflammation of the lungs. KEEPING SWINE TOO DIRTY, the skin being covered with mud, scurf or vermin, thus closing the pores and arresting the natural excretory function. If the function of the skin is thus arrested, the kidneys, lungs,

glands and mucous and serous membranes must either perform this extra duty, or disease will result, as it does in "hog cholera," and hence these organs are so often found affected in this disease. IMPURE DRINKING WATER, into which the drainings of the barn yard run, or that which is foul from refuse or stagnant matter, produces typhus in a household and will produce malignant disease in swine.

Lastly, INFECTION FROM BEING WITH SICK OR DEAD SWINE, OR EATING OF SUCH. It is even asserted that hogs eating the grass that grows on the ground where the dead of this disease have been buried, will be infected. We must remember that all similar diseases have a tendency to assume an epizootic or prevalent form, and that the more diseased or dead ones there are, the more decided this infectious or epizootic influence becomes. It is always safe, if not imperative, to keep well hogs away from the sick, dying or dead ones.

SYMPTOMS.—The symptoms are not the same from year to year, nor even during the same epizooty, but are varied by the prevalent genus of the disease and mode of its localization upon the different organs. The more early manifestations are: The eyes look dull and deep set in the head; the hair seems to rise or rough up; the inner corner of the eye is gummed up: the animal seems to be dull and weak; he does not run to his feed, but comes slowly or not at all; he eats as though he had no appetite; holds the nose down close to the ground, or it is drawn to one side; he does not lie down with the other swine, but mopes about by himself, or lies in the sun, instead of the shade; and as the disease progresses he refuses his food altogether. He lies down a good deal, has an unsteady gait, and shows

a tendency to bury his head, or even his whole body, in the litter. This first, or forming stage, may continue from a few hours to a day or more, when the condition presents a train of symptoms which are varied according to the localization of the disease.

If it falls upon the brain and spinal cord with intensity, the pig may give a sudden squeal, and fall down in convulsions and die in a few minutes.

If it falls more upon the throat, windpipe and lungs, then the ears swell with swelling along the neck; or the entire neck swells; or a hot, painful swelling appears along the throat or windpipe, which may even extend down to the fore legs and along the belly; there is also difficult breathing, with much heaving of the flanks, which, when extreme, is called "thumps"; with a wheezy, laborious cough, attended with evident pain, with froth from the mouth, and the squeal and grunting is hoarse; a reddish, bloody matter flows from the nose, and the dung is dry and pasty; in white hogs, red (erysipelas) patches appear about the neck and breast, with swelling; at first the patches are blood-red, running together, and later they become blueish, or, if the case becomes fatal, a blueish-black color. In some cases small blisters or pustules appear along the edges of the lips, mouth and tongue, which are filled with gangrenous, corrosive fluid, and later these become of a purple, lead or grey color. The hog, in attempting to run, sways about or totters, and the hind legs give out, so that he sits upon his haunches like a dog, and later the fore legs give out also. If started up, he runs off with a squeal, resting on his hind legs, with his nose to the ground.

When the morbid process localizes itself more upon the kidney and the lining membrane of the bowels, the *back soon becomes arched*, the animal is drawn up with evident pain and the belly becomes very tender; there is at first only very scanty wax-like or dry dung, or none at all, followed, in the more advanced or fatal cases, with frequent loose, offensive or bloody discharges. Towards the close the heaving of the flanks increases, reddish or frothy matter runs from the mouth and nose, and increasingly offensive discharges from the anus.

Duration of the Disease.—Some cases terminate fatally within two days, even in a few hours, after the first symptoms were observed, though an earlier stage was doubtless in such cases overlooked. But in general the average duration of the disease is from five to fifteen days, and some have continued from three to six weeks, and have recovered, while others have died from repeated relapses.

Treatment.—The best treatment of this disease is to prevent it by proper care and attention to the surroundings of the herd. But so soon as a single case has been noticed in a herd, the most energetic measures should be taken to prevent the disease extending. To this end the herd should at once be placed in a wide, roomy, well-sheltered lot, or under a shelter, if the weather is cold, where they can be kept comfortable and free from severe exposure to cold or wet or great heat, and where they can have good clean litter and a good supply of *pure water*. Their feed should be diminished in quantity, and should be given regularly, and be, if possible, of a more light and relaxing nature than they have been accustomed to. Care should also be taken that the

food is perfectly sweet and sound. The herd should be carefully watched, and any animal that shows the first symptom of the disease *should be carefully separated* from the herd, and given proper food and medicine. Animals properly treated in the earlier stage will, in almost every case, be saved, while those only treated in the more advanced stages will be doubtless less fortunate. The only food allowed should be good sweet milk or bran mashes, and to the very sick, only the former. They should be treated gently and kindly, as violence or fright increase the violence of the disease, and easily aggravates a slight attack.

THE MEDICINE FOR THE EARLIER SYMPTOMS, and for the ordinary stage, is the SPECIFIC A.A. for FEVER, INFLAMMATION, etc., of which the full dose for a large hog is twenty drops, or half as much for shotes. It may be given three times per day in ordinary cases; or, if the animal is very sick, once in three hours. As preventive, or with only slight symptoms, one dose per day is sufficient.

BUT WHERE A NUMBER OF HOGS are to be treated, put one teaspoonful, or sixty drops, of SPECIFIC A.A. into a new or perfectly clean pint bottle, half full of pure water, and after shaking well, give each hog a large spoonful at a dose.

IT IS SUFFICIENT that the medicine be put into the mouth so as to thoroughly wet the tongue. If the pig will drink, give it in a little sweet milk. (Fluid cannot be turned down a hog's throat without strangling it, as the fluid runs directly into the wind-pipe if the head is held back.) But as sick swine generally lie quietly on the side, the medicine may be given with the Medicator, or with a spoon

be poured quietly within the partly opened mouth. As a preventive, give the well or slightly ailing ones a dose in a little milk every day, for two or three days.

The SPECIFIC A.A. should be continued in the earlier stages, and all through the disease, except when there is ERYSIPELAS, or very *rapid sinking*, or *paralysis soon coming on*, when the SPECIFIC I.I. should be given in place of the A.A., or, the two may be given *in alternation*, at intervals of three hours; that is, first A.A., next the I.I., then the A.A. again, and so on. And this is the treatment for the worst or more advanced cases.

When the disease has localized upon the AIR-PASSAGES or LUNGS, as manifested by the frequent cough, heaving of flanks and great difficulty of breathing, the SPECIFIC E.E. for Pneumonia, will be better than the SPECIFIC I.I., and may be given alternately with the A.A., in the same manner as the above.

If the disease falls more upon the BOWELS, manifested by bloating, great tenderness and evident pain, arched back, and frequent offensive or bloody liquid dung, give the SPECIFIC F.F., in alternation with the SPECIFIC I.I., in the more advanced cases, or with the SPECIFIC A.A. in the recent ones.

For a paralytic condition, or partial *loss of power in the hind legs*, or for any weakness or want of thrift remaining after the acute disease has subsided, give the SPECIFIC J.K., morning and night, ten drops.

Purpura Hemorrhagica, "Stoppage of the Pores."

(See also page 206, same disease in the Horse.)

This disease is not unfrequently observed among swine, and it has been called "*Stoppage of the pores*," from the appearance which the pig presents, if white or light colored. In addition to the pig being restless or listless and breathing quickly, there will be *effusions* beneath the skin, appearing like bruised or black and blue spots, irregular in form and size on the forearms, thighs or under the belly, at first having a well defined margin, but later shading off into the unaffected skin; or extending over the breast, side or quarter; the lips on one or both sides are swollen, black and shining, even nostrils also; the eye may be injected, bloodshot, with red or purple spots on the gums and tongue. The muscles of the breast, fore and hind legs from the hock to the groin are swollen and hard; the urine is brown or reddish and offensive. As the disease advances, the nostrils become more swollen causing difficulty of breathing and snuffling noise, sloughing occurs, exposing raw, unhealthy looking sores beneath vesicles or form succeeded by ulcers, with increasing debility. The disorder may run from three to seven days, and is likely to be unfavorable when there is extensive effusion from the eyes, nose and eschenederian membrane, or much swelling of the thighs, or scanty tenacious urine; while it will be favorable if the swellings are confined to the limbs, the urine will be free, and internal organs are not implicated.

TREATMENT.—Give SPECIFIC A.A. at first three or four times per day. Later alternate SPECIFIC C.C. with the A.A., two doses of each daily.

Blue Disease—Carbuncular Disease.

This is regarded as a form of the beforementioned disease and is sometimes known as "*Distemper*" or "*Hog Cholera.*" It begins with dulness, holding the head low, loss of appetite. Later the pig lays on its belly and evidently suffers from pain there, and there is commonly retching or vomiting of food, mucus or bile. In some cases there is drowsiness and in others delirium; the skin becomes of a *blue* or *purplish color*, more especially along the back *inside* of the *thighs* and *belly.* Symptoms of paralysis of the hind legs appear; the surface becomes cold and death may occur in a few hours.

Give first SPECIFIC A.A. two or three doses at intervals of four hours, then alternate SPECIFIC I.I. with the A.A. at intervals of four hours for the paralytic condition, with longer intervals as the animal improves.

Boils or Carbuncles.

These annoying and sometimes dangerous swellings are somewhat common among swine. But as the subject and treatment is given under the same heading in the Chapter on DOGS, page 412, the reader is referred to that article, except that fomentation or opening is rarely required in the pig.

Brain Fever, Frenzy, Inflammation of the Brain.

Under this head are included inflammation of the parts within the skull, the brain and membranes investing it. It occurs chiefly in pigs which are full of blood, exceedingly fat and fed upon the most stimulating food.

SYMPTOMS.—Dullness and depression, less lively than usual, and seldom moving from one place to another. As the disease advances the white of the eye becomes covered with red streaks, the pulse is increased in frequency, the breathing quickened, the strength reduced, and the animal runs about from one place to another, evidently unconscious and deprived of the power of seeing. Death soon results, usually with convulsions.

TREATMENT.—Give the SPECIFIC for FEVER, A.A., a dose of twenty drops every two or three hours, according to the urgency of the disease.

Staggers, Stomach Staggers, Convulsions.

(See also this disease in the Horse on page 178-9.)

The condition, as its name implies, is known by the dullness, unsteady or staggering movement of the pig, or his falling down for a time unconscious. It is due to overfeeding, or use of too stimulating food, or overheating in the sun, and may be due to inheritance also. There is doubtless at first stomach overloading, resulting in oppressed circulation and congestion of the brain, manifesting in the staggering gait, the fit or convulsion, or in more extreme cases in apoplexy from effusion of blood upon the brain.

TREATMENT.—SPECIFIC A.A. at first and repeat the dose in two or three hours, unless sooner relieved, and later follow A.A. with SPECIFIC J.K. to correct the condition of the digestion, and prevent a return.

Thumps.

(See also Thumps, or Spasms of the Diaphragm in the Horse, page 161.)

This manifestation of gastric and nervous disturbance, is even more common in pigs than in other

domestic animals. It not only occurs as a prominent symptom in other acute disorders, but also at times seemingly independent. It consists of a *violent convulsive beating* or *abrupt knockings of the heart*, somewhat regular, with perfect intermissions, and with a violent jerking of the abdomen from the spasmodic action of the diaphragm. It may be connected with strictural disease of the heart, in which case it comes on more slowly, is constant though aggravated at times and has heavy, prolonged or irregular impulse of the heart, often differing from the regular heart beat or pulse. In the ordinary forms, however, it is the frequent accompaniment of either severe acute disease or the result of stomach oppression, resulting in deranged circulation, and this spasmodic action of the heart and diaphragm.

TREATMENT.—If it appears in the course of some other disorder it should be regarded as a mere attendant or symptom of that. When occuring prominently, give Specific A.A. a dose two or three times per day, and later give Specific J.K. to correct the predisposing condition. See also pages 127-128.

Apoplexy.

(See also Apoplexy in the Horse, p. 137; Sheep, p. 325.)

This condition is known by a sudden loss of sensation and of voluntary motion resulting from an effusion of blood or serum upon the brain, and is associated with a congested condition of the blood vessels of the head and neck.

It occurs in over-fat or plethoric pigs during exertion; or in those suffering from softening of the brain, which may result from plugging the veins with fibrous clots, the result of concussion or of congestion. Unless relieved, death or paralysis will be the ultimate result.

Give SPECIFIC A.A. and repeat the dose once in four or six hours. It affords the best chance of recovery.

Epilepsy.

(See also Epilepsy in the Horse, p. 138; Cow, p. 224; Sheep, p. 327; Dog, 384.)

The phenomena of this disease is sufficiently clear under the foregoing pages of this manual, as well as the pathology and the general treatment. The pig does not differ materially in these respects and should have the same treatment namely—a dose, twenty drops of SPECIFIC A.A., when the fit is over, and then occasionally á dose, twenty drops of SPECIFIC J.K. to prevent a return.

Paralysis.

(See also Paralysis in the Horse, p. 140; Sheep, 326 Dog, 384.)

Paralysis occasionally occurs in swine. It may appear as a result of congestion or inflammation or other disease of the brain or spinal cord, or from disease of the stomach or bowels, or as a result of excessive or over-stimulating feeding. It may affect one side or part of the animal, but most commonly the hind legs, which appear as if the animal had no power over them; he drags them after him or staggers, falls and lies upon the ground, or sits like a dog.

Give at first SPECIFIC A.A. a dose of twenty drops morning and night. Later or, for older cases, give SPECIFIC J.K. morning and SPECIFIC I.I. at night.

Sniffles, or Nasal Catarrh—Cold in the Head.

This disorder is induced by the same causes as produce it in dogs or sheep—cold, wet weather, changes of weather, exposure, etc.

SYMPTOMS.—Discharge from the nostrils of thin, watery fluid, which gradually increases in quantity, and may be mixed with blood, followed by cough, sneezing, difficult swallowing, obstructed breathing, general weakness, loss of appetite, swelling of the nostrils and contraction of one side of the snout. It is liable to lead to disease of the lungs, finally ending in consumption.

TREATMENT.—The SPECIFIC for DISTEMPER, C.C., will be found efficient. Give a dose of twenty drops two or three times per day. In case of much heat or fever, a dose or two of the FEVER SPECIFIC, A.A., may be interposed or alternated with the former, one morning, the other at night, every four or six hours.

Canker or Sore Mouth.

(See also this disease in the Dog, pp. 399, 400.)

This disease does not materially differ in swine from the affection as it appears in dogs, namely, unusual drooling from the mouth, discharge at first, thin, glairy, later more thick, purulent, and even bloody, with yet later ulcers or sores, difficult eating from the sore mouth and gums; appetite and condition lost, emaciation and exhaustion, more likely to occur in nursing sows.

TREATMENT.—If nursing, wean the pigs, give good nourishing food and a dose of SPECIFIC J.K., twenty drops at night.

Strangles or Quinzy—Angina.

This disease is as dangerous as it is common, and usually comes on very suddenly. It mostly occurs from sudden changes of weather, want of drinking water in times of great heat, or the use of cold or snow-water. It occurs chiefly in hot, imperfectly ventilated, unclean sties. Fat hogs are more subject to it than others, and healthy pigs are said to be affected from diseased ones.

Symptoms.—It begins with swelling of the glands under the throat; in proportion to the extent of this swelling the breathing becomes more difficult and heaving, and the swallowing more painful and obstructed; the pulse is quickened, and a high degree of fever results; the swelling, at first hard and painful when touched, becomes soft, red and more extended, and mortification is not an unusual result; the mouth is hot, saliva flows from it, and the tongue hangs out, red and swollen; the eyes are red, the appetite gone, the teeth are grated, the weakness increases, frequent moans are expressed, and unless relieved, the swelling increases so as to arrest the breathing, and the animal dies.

There is also a form of Quinzy, or disease of the throat, in swine which is sometimes epizootic and which bears a close resemblance in some respects to Diptheria in the human subject inasmuch as there is also formed a membranous exudation upon the diseased surface and greater prostration from the rapid vitiation of the blood. In this form our principal reliance must be upon Specific C.C. alone, or in alternation with Specific A.A., in doses repeated at comparatively short intervals once in two to four hours.

TREATMENT.--The SPECIFIC A.A. will generally be found sufficient, and should be given in doses of ten drops, every two hours, during the height of the disease, and then at longer intervals as the animal improves.

In extreme or severe cases, or of a very malignant type, with strong tendeney to mortification or putridity, the SPECIFIC C.C. may be given in alternation with SPECIFIC A.A., at the intervals mentioned,

Cough.

(See Cough in the Horse, p. 161; Cow, p. 241; Sheep, p. 332; Dog, p. 398.)

Consulting the foregoing it will be seen that cough in the pig as in other animals is a mere symptom due to some passing influence as a "cold" or chill, or to some more formidable disease with the cure of which it will disappear.

Give usually SPECIFIC A.A., one or more doses according to circumstances, and if not cured in a day or two, follow with SPECIFIC E.E., in like manner, one or two doses daily.

Bronchitis.

(See Bronchitis in the Horse, p. 164; Cattle, 242; Dog, 395.)

The cause, symptoms and course and treatment of this disease are well described in this Manual on pages 226-7 in the treatment of Cattle, and are all perfectly appliable to the treatment of Swine, namely, SPECIFIC A.A., at first and later to alternate with SPECIFIC E.E.

Inflammation of the Lungs, Pneumonia, Pleuro-Pneumonia, Pleura.

This disease may be caused in the hog by the same influences which produce it in other animals, but is very liable to be engendered by the impure

air of a sty, when dung and dirty litter are allowed to accumulate and decay; and is more liable to occur in some conditions of the atmosphere than others.

SYMPTOMS.—Shivering of the body, red eyes, hot breath, head stretched forward, quick, panting breathing, full, accelerated pulse, frequent or almost constant cough, with discharge of phlegm, sweating in various parts of the body, and tongue thrust from the mouth. All these symptoms increase, and the pig dies.

TREATMENT.—Give the SPECIFIC A.A. every three hours, a dose of twenty drops Should the disease not yield in the course of forty-eight hours, alternate it with SPECIFIC E.E., at the same intervals, and continue the two in alternation until cured.

Colic, or Gripes.

This disease is of occasional occurrence in hogs, and is of some moment, as it may terminate in inflammation of the bowels, and result fatally.

SYMPTOMS.—Restlessness, rolling on the ground, loud cries of pain, and other symptoms indicative of suffering.

TREATMENT.—Give first the SPECIFIC F.F., and if not cured, repeat the dose in two hours. If it does not yield, and especially if there is much heat, alternate the SPECIFIC A.A. with the F.F., a dose of twenty drops, at intervals of an hour or two until relieved.

Enteritis, or Inflammation of the Bowels.

It may be produced by the same causes which induce it in other animals. It may be known by the following:

SYMPTOMS.—The usual manifestations of pain in the bowels, as in colic, except that the pain is here continuous, and is aggravated by rubbing the belly. or by moving from one place to another; great pain when the belly is touched; frequent looking towards the belly, and squealing with the pain; other symptoms not differing from that manifested by the dog or sheep.

TREATMENT.—Give the SPECIFIC A.A., a dose of twenty drops, every two hours, and continue the treatment until the disease is cured. Sometimes, when there is extreme pain, a dose or two of the SPECIFIC F.F. may be interposed with benefit.

Diarrhea and Dysentery.

(See Diarrhea in the Horse, p. 186; Cattle, p. 263; Sheep, p. 336; Dog, p. 403.)

The symptoms are so well-known as to require no extended description. It may arise from bad food, soft, watery, rapidly grown green food, spoiled potatoes, turnips, apples, etc., stagnant, putrid water; undigested matter in the bowels from imperfect digestion, exposure to cold and wet or a billious condition.

If slight it will cure itself with the passing off of the offending irritating substance. But when more deep-seated the passages become more frequent and thinner or watery even with purging and straining, and with its continuance the pig becomes thinner, weaker, fails to eat his food, has rumbling in the abdomen, distended abdomen, offensive and even hurried breathing.

The SPECIFIC F.F., will usually be found quite sufficient, a dose of twenty drops two or three times per day. Boiled milk, and in bad cases, thickened with flour, is the best and proper diet. SPECIFIC A.A.

will cure a diarrhea, when the result of a chill or exposure to cold. In lingering or obstinate cases, or when there is straining or bloody discharges resembling Dysentery, or actual Dysentery, as occurs in Hog Cholera, it is better to alternate SPECIFIC I.I. with SPECIFIC F.F., and the doses may be given more frequently, say one dose every two, three or four hours, and the two SPECIFICS may be thus continued in alternation, the boiled milk and flour diet as before mentioned, until the animal is relieved.

Constipation.

(See also Constipation in the Horse, p. 188; Cow, p. 257; Sheep, p. 337; Dog, p. 404.)

This condition rarely affects Swine, but may result from improper food or disorder of the liver or spleen. Its symptoms are dry infrequent passages, or unavailing efforts to evacuate, attended with groaning, trembling, or other manifestations of pain.

Give SPECIFIC J.K., a dose of twenty drops, and repeat after some hours if necessary. If urgent, an ounce of sweet oil or castor oil in the food. If with fever, SPECIFIC A.A. will suffice.

Protrusion of the Intestine.

This condition is not uncommon in pigs, and is generally the result of constipation. It will generally yield to SPECIFIC A.A. If it fails give SPECIFIC I.I. morning, and SPECIFIC J.K. at night.

Inflammation of the Spleen.

(See the disease in Cattle, p. 278; and in Sheep, p. 338; also Splenic Fever, p. 227.)

As the treatment does not differ from the foregoing when the disease may be suspected in swine, it is needless to repeat.

Inflammation of the Liver, Hepatitis.

(See the same in Cattle, p. 275; Sheep, p. 337: Dog, p. 406.)

Indigestion, Mal-Assimilation, "Fluffiness."

(Consult Indigestion in the Horse, p. 177; Cow, p. 262; Dog, p. 401.)

From a careful examination of these articles it will be noted what are the usual causes and the symptoms present in the usual cases of indigestion in these animals, and also the general line of treatment. But in the case of swine, while simple indigestion is rare, there are occasional cases of mal-assimilation in which the animal fails to take on fat of sound quality, or, in the words of the breeder, grows "fluffy." Whether this condition is the result of too close, and too long "in-breeding," or the too artificial long continued life of the breed, may be a question, and should demand the careful attention of the breeder, and the general management be directed accordingly. For general treatment, if the pig is feverish, a few doses of SPECIFIC A.A. given night and morning are advisable. But for general treatment a dose, twenty drops of SPECIFIC, J.K. given at first daily, and then every other, or even third day, should correct such tendency to mal-assimilation.

Worms.

Swine in common with other animals suffer from worms, and when present in large numbers, show the usual signs of ill-health, such as unthriftiness, poor condition, pot-bellied, hide-bound, dry, scurfy skin, often itching, irregular and commonly voracious appetite, offensive breath, diarrhea alternating

with costiveness, sometimes colic, and more decisive than all, the passage of worms or their larvæ or eggs. But besides these symptoms common to all animals, swine are voracious, and yet do not fatten, cough, sweat, start from rest or sleep with a cry or scream, especially just before feeding, and they sometimes have a tender abdomen, or may suffer from "thumps," or attacks of vertigo or convulsions.

TREATMENT.—Swine affected with worms should have sound wholesome food and pure water as essentials to recovery, and may also have green food, roots, buttermilk, and a liberal supply of grain and plenty of salt. Give also every day for a week a dose, twenty drops of SPECIFIC D.D., and later a dose every two or three days, until cured.

Kidney Worm, Lard Worm of the Hog.

This worm is from three-fourths to one and three-fourths of an inch long, and one-thirteenth of an inch in diameter, and is at times found in all parts of the body of swine, more particularly in the liver, kidney and fat of the ribs. Often no impairment of the health is observed from its presence. In other cases weakness of the hind parts, diarrhea, and sudden death may result, or there is observed first, dragging one foot, loss of appetite, and finally refusing to get up at all, or when compelled to do so, drags the hind parts.

TREATMENT—Does not differ from that prescribed for worms in general, except to give SPECIFIC H.H. in alternation with SPECIFIC D.D., two doses of D.D. one day and two doses of H.H. the next. Our efforts will be most successful in prevention by

keeping the pigs upon ground free from the droppings of diseased or affected ones, as these droppings contain the eggs or larvæ of the worms, and are thus readily transplanted to new breeding ground.

Rheumatism.

By refering to what has been said in this Manual upon this disease as it is manifested in horses, cattle, sheep and dogs, the reader will readily infer what its symptoms and cause may be in swine. It may be supposed to exist when swine have been exposed to cold, rain, or some chills, without adequate shelter, and they become dumpish, then stiff or lame, and after a time there is swelling of some limb or part. There may be fever and heat, or in a more chronic form, with only, or mostly, some lameness and stiffness.

Give SPECIFIC A.A. at first, or while there is any degree of heat or fever, and later SPECIFIC B.B. a dose two or three times per day in such cases, and once per day in more chronic ones.

Measles.

The so-called measles of pigs, or that condition of the skin whence this term is derived, is only the local manifestation of a disease which affects the whole body. The causes are but imperfectly known.

SYMPTOMS.—The earlier symptoms are those of fever, namely, hot, dry skin, quick pulse, loss of appetite, hot and dry muzzle, *swollen eyelids*, *red eyes*, watery running from the nostrils, short, dry cough, etc. Then there are red risings on the skin in various parts of the body, but especially between the fore legs and between the hind legs, and in some cases the skin over these parts sloughs or separates

in large pieces, leaving angry sores behind, or it simply peals off without leaving any ulcers.

TREATMENT.—In the earlier stage, during the fever, and before the eruption has developed itself, give the SPECIFIC A.A. a dose every three or four hours, and the disease will be arrested.

Later, after the eruption has come out, alternate the SPECIFIC A.A. with the I.I. at intervals of four or six hours, until cured.

Mange.

This disease, consisting of an eruption of pimples and violent itching, is well-known, and its successful treatment requires the use of the SPECIFIC for ERUPTIONS I.I., internally, a dose of ten drops morning and night, and the use of the MANGE LOTION daily.

Lice.

Unclean, badly ventilated styes, and poor food will engender lice in pigs, and these pests, not only bite and annoy, but burrow beneath the skin in places, and produce a scabby eruption in the nature of a mange, and sometimes a severe ulceration. A strong solution of tobacco water is the most convenient and successful application, which must be repeated from time to time, as new crops are hatched out from the nits, deposited in the hair or skin. Powdered wood ashes, sprinkled over the pigs, bedding and pen, is often effectual, or water with kerosene or petroleum. Of course the stye and bedding must be cleaned or renewed, and the old bedding burned.

Breeding—Failure to come in Heat, Sterility.

(See also Sterility in Cows, pp. 23, 293.)

With high bred swine, and possibly from too long and too close "in and in-breeding," as well as from being too highly kept, sows do not come in heat. The period is either short and transient, or when served, they fail to come in pig.

The entire subject is there fully discussed, and the treatment is the same, with allowance for the increased dose in swine.

SPECIFIC G.G. is the proper remedy. Give a dose, and then repeat it every two or three days, especially about the time they should come in heat.

Bloody Pizzle in Boars.

This condition may arise from prolonged excitement, or excessive use, as well as from disease of the kidneys or urinary passages.

SPECIFIC H.H. is the remedy, and with avoidance of the exciting cause, will be effectual.

Abortion.

(See Abortion in Cows, p. 300-1; Sheep, p. 341.)

SPECIFIC G.G. is effectual in preventing miscarriage or abortion if the medicine can be given in time or when we have reason to suppose such a result may be impending. A single dose, or in rare cases a repetition after some hours should be sufficient.

Difficult Pigging.

When there seems to be a prolonged and difficult labor, a dose of SPECIFIC A.A. will be found effectual in relaxing the unnatural contraction of the bearing, and thus giving form to the natural expulsive efforts. It often acts like magic.

PART V.

DISEASES OF THE DOG.

CHAPTER I.

GENERAL DISEASES.

Distemper.

This is one of the most common diseases of the dog, and one that leaves in its train often very serious results. The earlier symptoms are very insidious. There is dullness; loss of appetite, flesh and strength may be remarked, while purging and vomiting are not uncommon. To this are added a short, husky cough, watery eyes, increased redness of the vessels of the eye, sensibility of the eye to light, increased frequency of the pulse. As the disease advances, the animal shivers with the cold, dislikes to be disturbed, seeks warmth, and courts solitude; the bowels are confined; the membrane of the eye covered with a fine net-work of bright red vessels; a thick discharge of matter flows from the eyes; the nostrils are covered with a glassy yellowish fluid; the cough is increased in frequency, and comes on in fits, which terminates in the discharge of a yellow, frothy fluid from the stomach; the skin is hot.

A later stage is marked by an increase of all the foregoing symptoms. The body wastes, the shivering is constant, the eyes are filled with a thick matter, which glues the eyelids together in the morning; tenacious matter clogs the nostrils and obstructs

the breathing. This causes much uneasiness and frequent but unsuccessful attempts to overcome the cause of annoyance. The discharge from the nostrils becomes bloody and offensive; the breath is fetid; the lips are covered with ulcers; short cries express pain; and the animal, becoming weaker and worse in every respect, at last dies, a severe diarrhea being the usual harbinger of that end.

Distemper frequently results in chorea, or St. Vitus' dance, paralysis, disease of the brain, ulcers on the eyes and opacity, inflammation of the lungs, or in numerous other ailments.

TREATMENT.—The earlier stages, before the discharge is established, are best controlled by the SPECIFIC A.A. of which give a dose of three or five drops, according to the size of the dog, morning, noon and night.

After the catarrhal stage has come on, give three or five drops of the SPECIFIC C.C. four times per day. This will, in general, carry the animal safely and speedily through this ordeal. Should other diseases declare themselves, they should be treated accordingly.

Should a general or partial paralysis occur, or inability to use one or several limbs, the Specific J.K. should be given, three or five drops, three times per day, until recovered. (See paralysis.)

Inflammatory Fever

Is known by a fever, attended with increased heat of the whole body, and with a quick, strong, decided pulse. It attacks dogs of all breeds and ages, but most frequently those from one year to three years old.

CAUSES.—Sudden changes from heat to cold; jumping into cold water after being very much

heated from running; excitement from various causes. Fever is accompanied with some degree of inflammation, however it may be occasioned.

SYMPTOMS.—The fever comes on with a dislike to move, and with a drowsy appearance, soon followed by great restlessness; constant getting up, turning round, and lying down again; great thirst; hard, frequent pulse; hurried breathing; red, swollen, watery eyes; burning heat of the whole body; dry, parched nose; intensely hot mouth; as the disease progresses the restlessness increases, and the dog stares, and frequently becomes unconscious.

TREATMENT.—Give, of Specific A.A., from one to three drops, according to the size of the dog, every two hours at first, and as the patient mends, a dose four times per day; and at the last, a dose of J.K. morning and night.

Putrid and Nervous Fever.

This disease seldom attacks dogs in the country that have their liberty, but dogs that are confined in unhealthy localities, or are ill-fed, are subject to it. It comes on suddenly, and, if not soon arrested, ends fatally.

CAUSES.—Half-starved condition; dirty, bad lodgings; heat; great effort; damaged or putrid food.

SYMPTOMS.—Loss of appetite; if at liberty, wandering about; if confined continually, changing position; fits of shivering; heavy, stupid look; turbid eyes; starting, as if frightened; howling; groaning; convulsions; great thirst; quick, small, scarcely perceptible pulse; high-colored urine, voided in small quantities; disgusting odor of perspiration and excrement. The disease generally lasts about a fortnight, and it does not appear possible to prevent its running a certain course.

TREATMENT.—Give, at first, Specific A.A., a dose of from one to three drops, according to the size of the dog, every two hours, for one or two days. Then alternate Specific I.I. with the A.A., a dose once in three hours during the day, and until late at night.

ACCESSORY MEASURES.—Dry, cool lodgings; plenty of fresh, cold water, frequently renewed; small quantities of cold milk frequently given, in which, if the dog is inclined to take it, a little biscuit may be soaked.

Small Pox.

This disease is most common in puppies before the sixth month, and is most severe in hot weather, or when dogs are kept very warm. A very cold atmosphere prevents its coming to the surface, in which case the animal is likely to die from congestion. It is strictly contagious, and is communicated from one dog to another very rapidly.

SYMPTOMS.—First there is a severe fever and perceptible oppression of the breath, after which the skin on the belly, groins, and between the fore legs becomes red, and then covered with small, round pimples, distinct or clustered in groups. The pimples gradually increase until the fifth day, when the top of each contains a clear fluid, which by degrees becomes yellow; the tops of the pustules then become flat, and by degrees hollowed, and either break and discharge their contents, or dry and form scabs. These by degrees fall or are rubbed off, leaving the skin covered with brown spots or small sores, which remain, removing the hair and leaving the skin bare. When the pustules break, the breath and all the excretions have a bad smell, and inflammation of the lungs is apt to set in.

TREATMENT.—Keep the dog cool during the feverish stage, in a well-aired room, and not by the fire; thus the pock will be much less; and give, every three hours, from two to five drops of the SPECIFIC for FEVER, A.A., according to the size of the dog.

After the feverish symptoms have abated, and the pock have come out, give from two to five drops, according to the size of the animal, of the SPECIFIC I.I. three or four times per day, until the cure is complete.

Rheumatism—Chest Founder—Kennel Lameness.

DEFINITION.—An affection of the muscles of the fore legs and chest, accompanied with stiffness and tenderness.

CAUSES.—Sudden exposure to cold and damp; going into water after running fast; lying in a cold, wet kennel; violent exercise. It chiefly attacks sporting dogs and house dogs.

SYMPTOMS.—Stiffness in the fore legs and shoulders; unusual firmness and tenderness of the muscles of the chest when pressed; swelling at the knees, with heat and tenderness; tenderness at the back of the shoulder or the ribs; accelerated breathing; impaired appetite; dry and hot nose. The animal often limps with one paw, trails it, or holds it up as he goes along, and howls when he puts it to the ground.

TREATMENT.—Give, at first, and more especially if there is heat or fever, Specific A.A., a dose every three or four hours, and later, if the lameness and stiffness is considerable, give Specific B.B., in alternation with the A.A., at similar intervals. For simple rheumatic stiffness, give Specific B.B., morning and night. Dose, one to three drops, according to size of dog.

ACCESSORY MEASURES.—The animal must be kept warm and dry, and protected from the inclemency of the weather. No meat of any kind should be given.

Dropsy.

Dropsy is a morbid accumulation of watery fluid confined to certain parts of the body, or affecting the cellular tissue; the latter form, called ANASARCA, is very rarely seen in the dog. The most common forms are: water in the cavity of the chest, hydrothorax; and water in the abdomen, ascites.

CAUSES.—General debility, brought on by want of food; diarrhea suddenly checked; damp lodgings. It may follow various diseases, such as inflammation of the lungs, or retroceding skin disorders; or be caused by a diseased state of the mesenteric glands, or of the liver.

SYMPTOMS.—Ascites is accompanied by enlargement of the abdomen; the water is sometimes collected in the abdominal cavity; at other times it is between the skin and the peritoneum; in the former case there is not that tense feeling which characterizes the latter. The presence of water may be ascertained by resting one hand on one side of the abdomen and striking the other hand against the other side, when *fluctuation* will be felt. WATER IN THE CHEST is accompanied by oppressed breathing and cough; both symptoms are aggravated by lying down. In either form of the disease there is loss of appetite, disinclination to move, the urine is passed in small quantities, the dog loses flesh and becomes weak.

TREATMENT.—Specific H.H., by increasing the action of the kidneys, is often efficient, a dose once in three hours. If not efficient, alternate Specific I.I. with the H.H., at the same intervals.

Abscess.

DEFINITION.—A collection of matter, generally appearing between the skin and the cellular tissue —occasionally close to the joint, and rarely (in the dog) upon some internal organ. It may appear on any part of the body.

CAUSES.—Injuries are the chief causes of abscesses in the dog, but they sometimes appear from weakness after certain diseases, especially distemper. When internal abscesses form, they are due to too great care, too high feeding, or want of sufficient exercise.

SYMPTOMS.—A swelling appears, which is hot, painful and inflamed; it increases in size, and finally bursts, when the matter is discharged. In other cases there is but little heat or tenderness, and the swelling increases slowly, and is occasionally hardened. If hardening takes place, instead of suppuration, there is usually a sub-cutaneous fungoid growth.

TREATMENT.—Specific I.I. is the remedy for such forms of disease, and may be given, a dose of from one to three drops, according to the size of the dog, three or four times per day.

ACCESSORY TREATMENT.—If an abscess appears to be forming, the part should be narrowly examined to ascertain if there has been any injury from a thorn, etc. If anything is found, it must be at once carefully removed, and THE MARVEL or VET. CURE OIL applied to the part. This, if attended to in time, will often prevent the formation of the abscess. But if the swelling continue, and it is certain that pus is forming, it will be hastened by fomenting the part with warm water, three or four times a day; if the swelling has increased in size and becomes softer, but does not break, it will be necessary to open it with a lancet or sharp penknife.

Tumors.

DEFINITION.—A deposit or growth of diseased structure confined to the part where it first appears. The tumors generally seen on the dog are of two kinds—(1) indurated, or hard; and (2) encysted, or enclosed in a sac or bag. They are seldom painful, unless considerable pressure be used; as a rule they are movable, and their extent can easily be determined. *Encysted tumors* are the most common; they vary in size, from that of a nut to that of a pint measure. They are sacs or small bladders filled with matter, smooth and soft, devoid of inflammation, and lie close under the skin. At times their formation is very slow; this is generally the case when they are due to constitutional causes, a fact which can generally be clearly ascertained.

LACTEAL TUMORS.

Tumors sometimes form in the teat when there is obstruction in its canal; or when the milk is dried up too soon or too quickly after suckling. They appear in different parts of the gland, as small, movable, hard bodies; increase in size; cause great inconvenience to the animal; and form an eyesore to its owner. If their progress be not arrested, they may ulcerate; or encysted tumors may form, which, if injured by dragging along the ground, may have a similar issue.

CAUSES.—Bruises; wounds; constitutional tendency; diseased condition of the secreting glands.

TREATMENT.—Hard tumors are best excised as soon as they appear. The operation is simple, and the wound will generally soon close up if left to the care of the dog, and after a time will scarcely be seen.

Encysted tumors are also best removed by excision. They may also be removed by tapping for the extraction of the fluid, and the subsequent injection of iodine. Should they become compound, they must be excised. On the other hand, when it is known that they have been caused by an injury, they will sometimes disappear by the use of the MARVEL OF HEALING, internally and externally.

Cancer.

All tumors are not cancers, but in certain constitutions, inflammation, indurated and encysted tumors may degenerate into cancerous growths. The cancerous tumor is at first small, hard, knotted and irregular in form; it then grows larger, and is attached to the skin; this inflames and ulcerates; and thus the cancer appears on the surface. Its edges are irregular, red or purple, and indurated; it is attended with considerable pain and a most disgusting ichorous or sanious discharge.

TREATMENT.—If in good health the tumor may be excised while the dog is under chloroform. But the cancer will return. If fully established, the animal should be put out of its misery. The best application is the VET. CURE OIL, and the best internal treatment is the Specific I.I., a dose two or three times per day.

CHAPTER II.

DISEASES OF THE HEAD AND NERVOUS SYSTEM.

Apoplexy.

DEFINITION.—A sudden, partial or complete loss of consciousness and power of motion, occasioned by determination of blood to the head.

CAUSES.—Pressure on the brain, from a congested state of the blood-vessels. Fat pet dogs are more subject to an attack than dogs moderately fed and allowed plenty of exercise.

SYMPTOMS.—Staggering walk, drowsiness, twitching of the muscles of the face and limbs; these are premonitory symptoms of an attack; or the fit may be sudden, when the dog falls down without power of movement and appears to be dying, but generally, after three or four hours, he gradually recovers.

TREATMENT.—Specific A.A. is the proper remedy, and may be given for the premonitions of an attack, a dose morning and night. If he has had the fit, give a dose at once, and repeat it again after two or three hours, and then morning and night for a time, to prevent a relapse. Dose, one to three drops, according to size of the dog.

ACCESSORY MEANS.—Wherever the fit occurs, if possible, let the dog remain, and apply cold water to the head with sponge. After recovery takes place, care must be taken as to diet; only milk or oatmeal and water should be given for a day or two.

Palsy, Paralysis.

This is not an unfrequent affection in the dog, especially those that are well fed, as pet dogs. It arises from disease of the brain or spinal cord, and is sometimes also the result of disease of the bowels or stomach.

SYMPTOMS.—It may occur in one side or part of the animal, and is most frequent in the hind legs, which appear as if the animal had no power over them; he staggers, falls, or lies on the ground, dragging his hind legs after him, unable to stand upon them.

TREATMENT.—Give the SPECIFIC J.K., two to five drops, according to the size of the dog, three times per day.

In case it comes on suddenly in well fed dogs, from an over-feed or gorging the animal, give a spoonful of castor oil and an injection of warm soap and water, followed with the prescription above.

Epilepsy, or Fits.

The dog is occasionally subject to true epilepsy, and not unfrequently to fits or convulsions arising from transient causes; such as teething in puppies, worms, want of exercise, and then too violent exercise. They are liable, also, to come on during distemper, or after it, or from disease of the brain. Small pet dogs are more subject to fits than others, as their nervous system is more excitable and their lives more artificial.

SYMPTOMS.—The fit generally comes on suddenly, the animal staggers, falls down, remains lying for an instant, and then ls violently convulsed; the legs become stiff, the face distorted, the eyes roll about, the tongue is thrust out, the jaws nearly closed or

firmly clenched. The convulsion becomes gradually less, and after some twitches they cease, and the animal in a short time appears well again.

In true epilepsy the fits recur again at diminishing intervals, and excitements may easily reproduce them.

TREATMENT.—Give on an attack, from whatever cause, from two to five drops, according to the size of the animal, of the SPECIFIC A.A., and repeat it once after the paroxysm is over. This will be sufficient for fits arising from any transient cause; but if the dog is subject to them, he must have SPECIFIC J.K. alternately with SPECIFIC A.A., a dose every day or two, and continued for some time, to effect a radical cure.

Chorea, St. Vitus' Dance.

This is a frequent result of severe distemper, especially in the case of young dogs, and it may also arise from worms or some disorder of the stomach.

SYMPTOMS.—The disease manifests itself by twitches, or involuntary jerks of various parts, as the leg, shoulder, face, neck, or even eyelids. Sometimes it is confined to a single limb or two, or the whole body may be affected. The animal has no control over them, and they are manifested even during sleep. He wastes, eats and sleeps badly, and may become palsied; at last he becomes incapable of any service, staggers, has convulsions, and is at last worn out.

TREATMENT.—Give the SPECIFIC A.A. each morning, and SPECIFIC J.K. each night, two to five drops, according to the size of the animal, and follow the treatment perseveringly.

Rabies, Canine Madness.

Much has been said upon the subject of *Rabies*, or *Canine Madness*, and from the general horror in which the disease is justly held, some consideration of it is proper, even if we do not possess the means of cure. The causes of the disease are involved in obscurity, yet it may be spontaneous or communicative. The former has been attributed to want of care, deficient water in hot weather, intense heat or cold, an inability to satisfy the venereal appetite. If communicated, it is from the saliva of the affected dog, in which case the disease seldom breaks out before the ninth day, often later. Two principal forms of this disease have been distinguished: rabies proper, and dumb madness.

Symptoms of Rabies Proper.—First change noticed is in the dog's gait in walking, either more lively and irritable than usual, or more dull and sad; peculiar restlessness; does not remain in one place; often quits his home and roams to a distance; he recognizes and obeys his master at the commencement, and even through the entire disease; generally no appetite from the commencement; some will take soup, but never solid food; they often, however, devour strange things, as wood, leather, straw, or even filth; they drink in all stages of the disease, as long as they can swallow; there is always a peculiar change of voice, more shrill or more grave, always slightly hoarse and disagreeable; the bark is peculiar, not in distinct emissions, as in health, but an emission of voice ending in a howl; the desire to bite is not constant, but comes occasionally in fits, and varying degrees; during the fits he bites everything, cats, other dogs, human beings, even his own master, or inanimate objects, and frequently snaps at the air. At first he is but little

changed in appearance; but soon the eyes become red; they open and shut alternately; later, they are dull, as if covered with dust; sometimes the skin wrinkles on the forehead, or the head swells; rapid emaciation; he becomes, finally, very weak, and drags his hind quarters, while at first he is strong, carries his tail as usual, and differs not in gait from a healthy dog.

The other form of madness is manifested by loss of appetite, drink, voice, and manifestation of the passion for biting, as in the first instance, modified thus: The lower jaw droops, apparently paralyzed from the commencement; he cannot swallow any liquid; saliva constantly flows from his mouth; the tongue often hangs from between the teeth; he bites less than in the first form; still, as there are times, when irritated, that he may close his mouth, the danger from biting is the same.

There are some popular errors, which are corrected by the following statements, thus: Dogs may become mad at any season of the year. Female and altered dogs may become mad by communication, though the disease originates, probably, with entire animals. Mad dogs drink in all stages of the disease, if the soreness of the throat, or paralysis of the jaws, or flow of saliva does not prevent them; they have even been known to swim in water. Mad dogs do not always carry the tail between the legs, but otherwise, during the commencement of the disease; it is, however, common in many other diseases, and in all dogs when pursued or frightened. Mad dogs do not always run in a straight line, unless pursued; they change their direction like other dogs, and run to objects which attract them. Other dogs do not avoid them, but if a stranger, it will be attacked by well dogs. Sound animals have no repugnance to

the saliva of a mad dog, but will even eat meat which is covered with it.

TREATMENT.—All the means hitherto discovered to arrest the disease have proved unreliable. BELLA DONNA and the SPECIFIC A.A. may do something, and had best be administered in all doubtful cases; but if an animal is indisputably rabid, it should be killed at once. The excision of the gland or ligament under the tongue is only mutilating the animal to no purpose.

If a dog is suspected, or has been bitten, or exposed to contagion, give him the SPECIFIC A.A. three or four drops, according to his size, three times per day, and inject a dose of the same medicine into the wound at the same time. Only a small proportion of the animals or persons bitten by animals supposed to be rabid ever become mad.

CHAPTER III.

DISEASES OF THE EYES, EARS, NOSE, ETC.

Inflammation of the Eye, Ophthalmia.

It may arise from a variety of causes, such as congestion of the brain; exposure to heat and cold; over-exertion; blows or other injuries; over-salted food, etc.

SYMPTOMS.—The white of the eye is covered with red streaks; the clear portion in front (pupil) is dim; water runs down the face; the light cannot be endured and the eyelid is closed. An ulcer may appear afterwards in the front of the eye, and it may go on until it penetrates through the outer coating of the eye (cornea), and the fluids of the eye thus escape. In some cases proud flesh springs up from these ulcers.

TREATMENT.—The SPECIFIC A.A. should be given, a dose of two drops only, two or three times per day. This in general will be sufficient for all forms of ophthalmia; but if the case is of some standing, or if ulcers or degenerations have taken place, two drops of SPECIFIC I.I. may be given every night, and the SPECIFIC A.A. in the morning, with the best possible results.

A wash of HAMAMELIS, diluted one half with soft water, will promptly relieve, and also accelerate the cure.

Amaurosis—Gutta Serena.

This is a disorder of the optiv neve nerve, the causes, symptoms and treatment of which are fully described with reference to the horse. The observations on cataract in the following section are applicable here. You may try Specific A.A., a dose every day or two.

Cataract.

Opacity of the crystalline lens, or of its capsule, or both, prevents the transmission of light, and thus causes blindness. One or both eyes may be affected; old dogs generally suffer in both. The causes are the same as those which lead to cataract in the horse; and to the section thereon reference should be made. But little can be done by way of medicine; Specific A.A. will sometimes relieve.

Pterygium.

This disease, which consists in a thickened state of the cellular tissue of the conjunctiva, extending from the inner angle of the eye towards the cornea, is not uncommon in dogs, both old and young. In pups it is often cured by the mother's licking the eye; but in old dogs it proves intractable. It sometimes follows ophthalmia.

TREATMENT.—You may give daily a dose, one to three drops, of Specific A.A., with decided benefit.

Eczema of the Eyelids.

In this affection small pustules appear on the edges of the lids at the roots of the lashes; presently they break, emit matter, which dries into crusts, mats the hair, and glues the lids together. If not arrested, the ulceration extends and destroys the bulbs of the hair, and with them the eyelashes.

TREATMENT.—The eyelashes should be clipped off close to the eyelids; the parts carefully washed with a sponge and diluted MARVEL, morning and night, to prevent agglutination. When crusts have formed, they can be best softened and removed by fomentations with warm water. Care should be taken not to drag away the purulent matter with force. Give Specific I.I., morning and night.

Fistula Lachrymalis.

The lachrymal canals, which originate from the internal angle of the eye, convey the tears into the lachrymal sac, an oval bag, which is a receptacle for tears. It is situated near the angle, and constitutes the upper extremity of the nasal duct. If this duct be obstructed, the tears flow over on the cheek and a small tumor forms in the sac. This is followed by inflammation, suppuration, and the formation of an abscess, which bursts externally and leaves a fistulous opening, through which tears flow from the sac on to the cheek.

TREATMENT.—Sponge the eye with warm water, and give Specific A.A., morning and night, if the eye or lids are inflamed, or the Specific I.I., if no manifest inflammation is present.

Canker in the Ear.

This disease consists of an inflammation of the internal ear, followed by ulceration and the formation of matter. It is usually the consequence of some injury, but may also result from excess of food and want of exercise, or from frequent and sudden exposure, as in case of dogs taught to go in the water, among whom it is quite common; fat dogs are more subject to it than others.

SYMPTOMS.—The dog manifests pain by shaking his head, scratching his ears, or whining. The internal ear looks red, afterwards may ulcerate; a

discharge occurs, and a blackish fluid will be found at the bottom of the ear, sometimes in considerable quantity; there is high fever, which, with the continuance of the discharge, may wear out the dog.

TREATMENT.—Wash the ear frequently with warm water, to carefully remove the discharge; afterwards apply some diluted MARVEL.

Give the SPECIFIC A.A. three or four drops, alternately with Specific I.I. The same dose four times per day; it may be successful.

Deafness.

CAUSES.—It is sometimes a sequel of distemper, fever, or inflammation of the brain; it is also due to general debility, an accumulation of hardened wax, old age and canker.

TREATMENT.—Examination must be made to ascertain if it is due to the impaction of hard wax; if so, a little warm water and soap may be injected twice a day; after a few days the wax will most likely be softened sufficiently to allow of its removal. If the disorder follows distemper, Specific C.C. should be given; if fever or inflammation of the brain, Specific A.A.; if canker, also the Specific C.C., a dose morning and night.

Serous Swelling of the Ears.

This affection of the ear generally arises from some injury, which is followed by an accumulation of a pale, straw-colored fluid between the outside and inside skin of the ear. Sometimes it increases slowly, at others rapidly, so much so that in a few days there will be a quarter of a pint deposited. The best thing is to open the swelling at once with a lancet, at the lowest part of the inside of the ear, and press out all the fluid. If this can be done effectually, adhesion of the two skins takes place

without anything else being necessary. But if the discharge has been caused by a severe blow, it may continue for a week or two. Occasionally, if the punctured place is not kept open, the fluid accumulates a second and third time; if such should be the case, it will be advisable to inject a little warm water, and lay the ear in a vessel containing warm water for five or ten minutes, once a day for several days. Give Specific I.I., also, morning and night.

Scurfy Ears.

Scurf is mostly found on the ears of dogs with short coats; it comes generally on the outside of the ears, beginning at the tips, and gradually extends down to the roots.

CAUSES.—Constitutional tendency; unsuitable food; want of cleanliness; sudden disappearance of mange.

TREATMENT.—Specific I.I. is the proper remedy, given once or twice per day.

The ears should be washed once a day with warm water and soap. After they are dry, the following lotion should be applied with a sponge: Glycerine one part, MARVEL OF HEALING two parts, to water three parts.

Ozæna.

Ulcerations of the nose are not common in dogs, but they should not be neglected, as they might injure or destroy the sense of smell. They sometimes occur in old dogs, and emit a purulent, or sanious, and most offensive discharge. This condition is attended with pain, noisy breathing, attempts to sneeze, etc.

TREATMENT.—Specific C.C. is the proper remedy, and may be given two or three times per day.

The nostrils should be washed and syringed with tepid water, morning and night.

CHAPTER IV.

DISEASES OF THE RESPIRATORY ORGANS.

Angina—Sore Throat.

DEFINITION.—Inflammatory swelling of the larynx and trachea.

CAUSES.—Exposure to sudden cold when heated; damp lodgings.

SYMPTOMS.—The first are generally sneezing, hoarse cough, ears and nose alternately hot and cold, noisy breathing, caused by swelling of the glands under the throat and jaw; difficulty of swallowing. The front of the neck, especially about the larynx, is much swollen; when the swelling is considerable, internally and externally, the breathing sometimes becomes so much embarrassed that the animal dies of suffocation.

TREATMENT.—Give Specific A. A., a dose every hour at first, and then every two hours, until relieved.

ACCESSORY MEANS.—The frequent application to the throat of cloths dipped in hot water; cold water, frequently renewed, for the dog to lap; cold milk and broth as diet.

Catarrh—Coryza—Cold.

DEFINITION.—As a rule, coryza in the dog consists of inflammation of the mucous membrane of the nose. It is most frequent among dogs that are petted and kept in warm rooms. It may lead to distemper, bronchitis and other diseases of the respiratory organs.

CAUSE.—Change of temperature, especially in spring, during the prevalence of easterly winds.

SYMPTOMS. -Running from the nose and eyes; sneezing; diminished appetite; accelerated breathing; dullness; heaviness; sleepiness.

TREATMENT.—Specific C.C. is the proper remedy, a dose, one to three drops, three or four times per day.

ACCESSORY TREATMENT:—It will facilitate the cure if the dog is kept in a warm place for a day or two, not allowed to go out at all, and fed upon milk or thin oatmeal gruel. He should also have plenty of water to drink. The nose and eyes should be sponged with tepid water several times a day.

Bronchitis—Acute and Chronic.

DEFINITION.—Acute bronchitis is active inflammation of the membrane of the air-tubes of the lungs. Chronic bronchitis more particularly affects old dogs.

CAUSES.—Sudden changes of temperature; standing in the cold when heated; cold draughts of air in the kennels, or wherever the dog is kept, frequently cause bronchitis.

SYMPTOMS.—The first symptoms of acute bronchitis are generally those of a common cold; shivering; short, hard cough; constant distressing cough, at first dry, afterwards accompanied by a sticky mucous; feverish symptoms; accelerated pulse and breathing; loss of appetite; dullness; an anxious look depicted on the countenance. Auscultation detects a wheezing sound, or rattling of mucous, in the trachea and bronchial tubes. The nose is hot and dry at the commencement of the attack, but becomes moist when the inflammatory stage is passed. Chronic bronchitis consists of a cough during the winter months, which comes on after changes in the temperature, and is attended with shortness of breath and wheezing.

TREATMENT.—Give, at first, and during the feverish stage, a dose, one to three drops, according to size of the dog, of Specific A.A. After the more urgent symptoms have been relieved, Specific E.E. may be given, in alternation with the A.A., or, to complete the cure.

ACCESSORY MEANS.—The dog should be kept in the house, and in one temperature, as nearly as possible. A pail of boiling hot water may be placed in the kennel, from which the steam will evaporate and keep the air moist; this will be found very beneficial. Milk, or bread and milk, constitute the best diet; farinaceous food, but no meat; fresh supplies of cold water. Meat broth may be given in cases of great debility and old age.

Asthma.

This disease, which most nearly resembles broken wind in the horse, is characterized by difficult breathing, with intervals of free respiration.

CAUSES.—Close confinement, want of outdoor exercise, excessive feeding; it is observed almost wholly among fat and petted dogs, from four to seven years old.

SYMPTOMS.—The disease is insidious in its invasion; it begins with a slight cough, which returns at irregular intervals, and is therefore likely to escape observation. It, however, becomes more frequent and troublesome; is harsh, dry and sonorous, and may give the mistaken impression that there is a bone in the throat. It is then provoked by every change of temperature, food or posture; becomes almost incessant; disturbs sleep; produces nausea and sickness, but nothing is expelled besides mucous from the respiratory passages, where its presence is a cause of irritation. Meanwhile the breathing is affected, and is not unfrequently very labored and

painful. The digestion is also impaired; the appetite is slight or morbid; the breath offensive; the teeth covered with tartar; the coat rough; the skin mangy. In some cases the dog is worn down by the irritation of the cough; in others the pulmonary congestion arrests respiration, and causes suffocation; or cardiac difficulties cause accumulation of blood in the head, and consequent convulsive fits. But the disorder generally ends in hydrothorax or ascites—generally the latter. In these cases the body wastes, the abdomen is enlarged, the legs swell, the coat is staring, the breathing very laborious, till, ultimately, suffocation puts an end to the animal's existence.

TREATMENT.—If the disorder be treated judiciously in the early stage, it is curable; but if it has continued for any length of time, only palliation can be looked for. Give Specific E.E., a dose, according to size of dog, two or three times per day. For a fit of asthma or bad breathing, give Specific A.A., every hour. For old, bad cases, try Specific I.I., three times per day.

ACCESSORY MEANS.—Exercise should be regularly taken in the open air, except when the weather is cold, or damp, or sultry. The food should be of the best and most nutritious quality, given frequently, but in small quantities at a time.

Inflammation of the Chest, Pneumonia or Pleurisy.

Inflammation of the chest usually involves both the pleura or lining membrane of the chest, and the substance of the lungs, so that they may be advantageously treated. It is usually the result of cold and exposure after being heated; it may also be produced by wounds.

SYMPTOMS.—Shivering chill, followed by heat and thirst; the sides are painful when pressed upon; stitches are observed; the dog sits upon his haunches, with the fore legs separated from each other, and the head held forward; the breath hot; cough short and painful; breathing frequent, labored and heaving; pulse full and quick; tongue hangs out of the mouth; eyes thrust forward and red; finally drowsiness, and death. Sometimes the effusion of water in the chest is very abundant, when the legs swell, and breathing becomes difficult, labored and suffocating.

TREATMENT.—Give first, three or five drops, according to the size of the dog, of the SPECIFIC A.A., and repeat the dose every two hours for the first twenty-four hours. Then alternate the SPECIFIC E.E. with the A.A., at intervals of two or three hours, until the animal is cured.

Cough.

In most cases cough is symptomatic of disease, and often indicates the commencement of some serious disorder of the respiratory organs, when it should not be allowed to continue unheeded. Well-fed dogs often have a dry, searching cough, which, if they are old, degenerates into asthma. Cough is sometimes consequent on obesity, when the amount of food should be lessened, exercise taken, and Specific J.K. administered. If it be caused by the dog's going into the water, or being washed with warm water in winter, or being confined for some time in a low, damp situation, Specific I.I. or E.E. are the remedies. Such a cough is generally harsh and hard, and accompanied by vomiting of tough mucous. A dose two or three times per day is sufficient.

CHAPTER V.

DISEASES OF THE DIGESTIVE SYSTEM.

Salivation.

Mercury, in its various forms, is sometimes given to dogs by ignorant persons, or by chemists and dog-fanciers, for some real or supposed disease; or it is applied to them externally as an ointment for mange, in either case resulting in salivation, with the following—

SYMPTOMS.—Loss of appetite; sore, swollen gums, which are blueish, easily bleed, and generally ulcerate; loosened teeth, which may even fall out; constant dribbling of slaver from the mouth; offensive breath; swelled glands; extreme weakness; hair falls off; and frequently purging, attended with straining.

TREATMENT.—Give the SPECIFIC A.A., a dose each morning and noon, and a teaspoonful of the MARVEL at night, especially if there is ulceration of the mouth or throat. If not improved after three or four days, substitute SPECIFIC I.I., three or five drops, morning and night, which continue until cured.

Canker in the Mouth.

This is a very troublesome affection, and often difficult to cure; indeed, if the disease be the result of long-continued local irritation, or the dog be old, it is generally considered to be incurable.

SYMPTOMS.—The gums are swollen, and discharge purulent, bloody, offensive matter; "proud flesh" is formed; bleeding ensues; there is difficulty in eating; appetite and condition are lost; emaciation and exhaustion follow.

TREATMENT.—When the disease is of recent origin, or the dog is young and generally healthy, the mouth should be washed out once a day for several days, with a solution of THE MARVEL OF HEALING, half water; and give it, say three times per day, two to three drops, according to the size of the dog, of Specific J.K. It is usually promptly efficatious.

Diseases of the Teeth.

The teeth are more frequently affected in the dog than in other domestic animals. This may be the result of a variety of causes, among which are the following: Eating or gnawing bones, by means of which the teeth may be broken or ground down to the quick; healthy, well-fed dogs only pick their bones; rich, sweetened food, which has an injurious effect upon the teeth; mercury, frequently given to dogs, which produces salivation, loosening, and eventually falling out of the teeth. Teaching dogs to carry or chase hard substances, stones, etc., frequently results in diseased teeth, as they are thus rubbed down to the gum, and the stump produces much mischief.

SYMPTOMS.—If the dog has a bad breath, seems to be in pain when he eats, does not thrive or manifest his usual spirit, the mouth should be examined. One or more teeth will be found worn down to the gum; the fang produces irritation, and may result in an abscess; the sides of the mouth are raw and ulcerated, and slaver dribbles from it.

TREATMENT.—Extraction is the sole remedy for loose, irregular or decayed teeth.

Indigestion.

DEFINITION.—Imperfect transformation of food into a state suitable for the nourishment of the body.

CAUSES.—Improper food, or food in too large quantities; want of exercise.

SYMPTOMS.—Restlessness; partial loss of appetite; frequent attempts to vomit, sometimes bringing up only froth, at other times a mixture of froth and green fluid; foulness of breath; irregular action of the bowels; distention of the body; lying out at full length and rolling over; the appetite is vitiated or impaired.

TREATMENT.—Give Specific J.K., for indigestion, a dose, one to three drops, according to size of dog, once in two, three or four hours. Often a dose night and morning is sufficient.

ACCESSORY MEANS.—Attention to diet and regular exercise go a long way towards curing and preventing this disease.

Vomiting.

It is such an easy matter for dogs to vomit that the least thing which disagrees with the stomach occasions it. It is rarely of any consequence, as it does not interfere with the health; but there are some cases of continued vomiting, in which it is necessary to administer medicine.

TREATMENT.—When vomiting takes place daily for several days, and soon after eating, it will most likely be remedied by changing diet; if it continues after the diet has been changed, give a dose of Specific J.K., morning and night. Should the dog be bloated or full of gas, a dose of Specific F.F. will be curative.

Gastritis—Inflammation of the Stomach.

CAUSES.—Drinking cold water when heated from running; damp kennels; continued feeding with rich food; indigestion; poisons.

SYMPTOMS.—Great pain; the dog throws himself on the ground, kicks and rolls; there is constant desire for cold water, but as soon as any food or drink is swallowed, it is rejected; constant retching; dry and hot nose; cold extremities; quick breathing; anxious countenance; lying on the belly on the coldest ground the dog can find.

TREATMENT.—Specific A. A. is the proper medicine. Give a dose as often as every hour if in great distress, and at longer intervals as the patient improves. From one to three drops, according to size of dog.

ACCESSORY MEANS.—Nothing but cold water should be allowed till all the symptoms have disappeared; even then great care must be exercised for several days, as to the kind of food given; cold milk or oatmeal gruel will then be suitable, in small quantities.

The treatment of gastritis produced by poisons consists in removing the poison from the system and neutralizing its effect.

Enteritis—Inflammation of the Bowels.

DEFINITION.—Inflammation of the bowels, either of their whole substance or only the inside or lining membrane.

CAUSES.—Drinking cold water when heated; exposure of petted dogs to cold, damp or sudden changes of weather; keeping the kennels of chained dogs on a damp, sunless situation; too long continuance of animal food; flatulent colic; obstruction of the bowels from hardened fæces, foreign bodies, etc.

SYMPTOMS.—Violent pain, without cessation; great tenderness of the abdomen, which is very hot; the pain is often so severe that the poor animal throws himself violently down, howls, springs up again, walks about for a few seconds, throws himself down again, rolls over and cries out; these actions are repeated until relief is obtained, or, in fatal cases, till a short time before death takes place. There are also aversion of food, constant thirst, constipation, the excrement coming away in small, hard pieces during the first stage of the disease; the evacuations afterwards become loose and bloody.

TREATMENT.—Specific A.A. is the proper remedy, and a dose of from one to three drops, in a spoonful of water or milk, should be given, at first every half hour, then, as he improves, every hour, and as improvement progresses, at still longer intervals, until relief and a cure is obtained. Sometimes interposing a dose of Specific F.F. is beneficial, if there are loose, bloody stools, or violent pain.

ACCESSORY MEANS.—Fomentations of hot water should be applied to the body, and continued till the symptoms have abated; cold water given to lap; milk and broth may be given when the severe symptoms have subsided.

Diarrhea.

Excess of food, bad food, exposure to cold and wet, as well as a bilious condition, may induce diarrhea in the dog. If slight it will cure itself. It usually manifests itself by sickness, vomiting, thirst, discharges more frequent and thinner than usual. If it continues, the animal becomes thin, weak, does not eat his food, and his breath becomes offensive.

TREATMENT. — The Specific F.F. will be found effectual. Give three or four drops, according to the size of the dog, three times per day.

Dysentery.

It is not unfrequently a termination of diarrhea, or it may be produced by similar causes.

SYMPTOMS.—Thirst, heat, purging of fluid mixed with small pieces of dung, attended with severe straining and pain; often the discharges are of mucous mixed with blood. There is loss of strength and appetite, with rapid wasting.

TREATMENT.—Give the Specific F.F., two to five drops, every one, two or three hours, according to the urgency of the case.

Colic.

Colic is not unfrequent in the dog. It is often connected with constipation, and may result from bad food, sudden change of food, exposure to cold, or from worms. It is common in puppies.

SYMPTOMS.—The dog has sudden pain in the bowels; it comes on in fits, is worse at one time than another. The dog is restless, frequently changing his position; he extends himself and then draws himself in, turns his head towards his sides, throws himself down, rolls about, moans or whines when the pain is severe, with a short, rough voice.

TREATMENT.—The Specific F.F. should be given a dose, from three to five drops, according to the size of the dog, and repeated every half hour or hour, as the urgency of the case demands.

Should it not promptly relieve, the Specific A.A. or J.K. may be given alternately with Specific F.F.

Constipation, or Bound Bowels.

Constipation is more frequently observed than diarrhea in a dog. It may be the result of a want of proper exercise, improper food, or some disorder

of the liver or other part of the digestive system. It is manifested by frequent unavailing efforts to evacuate, attended with groaning, trembling or other manifestations of pain. It may result in mange, or even inflammation, unless relieved.

TREATMENT.—Give the SPECIFIC J.K. three to five drops, according to the size of the animal, three times per day.

Should this course not relieve, an injection of warm soap and water should be given, and repeated, if necessary, until the result is accomplishe

Worms.

No animal is so subject or so frequently tormented by worms as the dog. This is doubtless owing to his highly artificial life and the great variety of food given him. There are three varieties: The first is red, resembling the earth-worm, and is common in puppies; the second is the *tenia* or tape-worm, which is sometimes of great length, flat, in joints, and occupies the small intestines; the third is the *ascarides* or pin-worm, half an inch to an inch in length, thread-like, pointed, and housing in the lower part of the bowels.

SYMPTOMS.—All worm symptoms are questionable, except finding them in the discharges. Their existence may be inferred if the dog has a short, dry cough, bad breath, greedy appetite, rough coat, bound bowels or purging, turns of griping, wasting or fits.

TREATMENT.—Give the SPECIFIC D.D. two to five drops, according to the size of the dog, two or three times per day. Its continuance will not fail to eradicate them from the system.

Thread-Worms (Filaria Inemites).

These thread worms inhabit principally the heart, lungs, and sometimes the throat and air-passages of the dog. They are sometimes found in bundles, slowly unrolling themselves when the part is cut open, or are found stretched out along the surface.

The characteristic symptom is a peculiar cough exhibited by any movement, especially after sleeping, ending in a violent effort to bring up something. When affected, the dogs run violently; they fall down, become stiff, insensible, and after a time get up and renew the chase.

Treatment is the same as for other species of worms.

Inflammation of the Liver, Jaundice (Hepatitis).

This disease is occasionally found in dogs, more particularly in fat ones. It may be the result of excess of food and deficient exercise, or exposure to cold or moisture.

SYMPTOMS.—The dog is dull, sleepy, shrinks from notice, and becomes thin; eats little and is thirsty. The skin, gums, lips and parts of the skin not covered with hair are yellow; the urine is yellowish and dung dark-colored, hence the name *Jaundice* or yellows. He is sometimes hot, at others cold; he vomits a yellow fluid, which may afterwards become greenish, and have streaks of blood in it. These symptoms all increase until the dog becomes thin as a skeleton, and at last dies, quite worn out.

TREATMENT.—Give the SPECIFIC A.A. alternately with SPECIFIC J.K., a dose of three to five drops, according to the size of the dog, every three or four hours, as the urgency of the case may demand. Old cases of liver complaint simply require a dose of the SPECIFIC J.K. morning and night.

CHAPTER VI.

DISEASES OF THE URINARY AND GENERATIVE SYSTEMS.

Nephritis.

DEFINITION.—Inflammation of the kidneys, sometimes ending in an alteration of the secretions. It is not a very common disease, but when it occurs it is very dangerous.

CAUSES.—Exposure to cold and wet; seasoned food; over-exertion; strains; injuries; the presence of calculus; the administration of cantharides and turpentine in excessive doses.

SYMPTOMS.—Tenderness of the loins; stiffness of the hind legs, which are carried wide apart when moving; hot and dry mouth and nose; great thirst; frequent turning of the head towards the flanks; the urine is passed in small quantities, with straining, highly-colored, like blood, or thick and glairy; the appetite is lost; there is disinclination to move, and when the dog is obliged to stir the back is arched.

TREATMENT.—Give Specific H.H., from one to three drops, according to the size of the patient, once in three hours at first, and then at longer intervals as the patient improves. Specific A.A. may be sometimes called for as an intercurrent remedy, or to give between doses of the H.H.

ACCESSORY MEANS.—Cloths wrung out of hot water and laid across the loins will be beneficial; nothing but milk must be given for several days.

Inflammation of the Bladder, Cystitis.

This disease, which is a very dangerous and painful one, may be caused by stones in the bladder, injuries, fall upon the bladder when it is full of water, or similar accidents.

SYMPTOMS.—Hot, dry skin; pain in the back and flanks; thirst; no appetite; restlessness and signs of pain; frequent attempts to pass water, in which either one or only a few drops are passed at a time; the water may be clear, or thick and mixed with blood.

TREATMENT.—Give first two or three doses of the SPECIFIC A.A. at intervals of two hours, then give the SPECIFIC H.H., a dose of three or five drops, according to the size of the dog, until entirely relieved, at intervals of two to three hours.

Gonorrhea, Gleet.

This disease, which is essentially an inflammation of the urethra, generally arises from taking the disease by connection with other animals that have it, or from repeated acts of sexual connection, which induces irritation, followed by a gleety discharge; or it may arise in a modified form from uncleanliness.

SYMPTOMS.—Discharge from the internal surface of the sheath and urethra, or canal through which the water flows, consisting of matter having a yellowish or greenish color, glueing together the parts or hair about them; the surface looks red and angry, and is attended with swelling and pain; there is frequent desire to pass water; sometimes the swelling and pain are but slight.

TREATMENT.—Give the SPECIFIC H.H., a dose of three or five drops, according to the size of the dog, four times per day.

In old cases, a dose of the SPECIFIC J.K. given nightly, will be of decided benefit.

Inversion of the Womb.

This sometimes occurs after parturition, either from disease of the womb, or from straining to void the placenta. The treatment consists in carefully washing the womb with tepid water, and then with the fingers (oiled) returning it to its proper position. The womb in these cases is turned inside out, so that what is the inside when in its proper position becomes the outside when it protrudes from the vagina. Therefore, to replace it, the pressure must be from the part furthest from the vagina, and made with careful, gentle pressure. The replacement is easily affected, especially if an assistant holds the bitch up by the hind legs. After the organ is replaced, a little VET. CURE OIL may be applied or poured into the vagina, and a dose or two of Specific A.A. given. Afterwards, if there are symptoms of straining, the bitch must be made to stand or walk about, and Specific G.G. must be given.

Inflammation of the Teats.

This generally comes on a few days after the bitch has pupped. At first there will be found small lumps at the base of the teats, which are very tender; the swelling soon increases, and extends all around the teats; they then become very hot, and of a deep-red color. The sucking of the pups causes so much pain that the bitch refuses to allow it. When this is the case, the inflammation soon extends over the whole udder, and if it be not arrested, suppuration takes place, and an abscess forms at the base of one or more of the teats.

TREATMENT.—Give Specific A.A., a dose of one to three drops, once in say three hours at first, then once in six hours, and bathe the teats in the MARVEL OF HEALING, or if cracked or very sore, apply the VET. CURE OIL morning and night.

CHAPTER VII.

DISEASES OF THE SKIN AND EXTREMITIES, AND MECHANICAL INJURIES.

Eczema—Surfeit—Blotch.

DEFINITION.—A non-contagious, vesicular disease of the skin, not occasioned by the presence of parasites, but dependent on constitutional predisposition. It is sometimes termed mange, but is distinguished from that disease by the absence of *acari*. Foul mange is an aggravated form of eczema.

CAUSES.—Hereditary constitution; insufficient exercise; gross diet; food too spare or too full in quantity, or unwholesome in quality; close kennel; dirty bedding, too hard or too luxurious a bed, etc. Flesh food will produce it; so, also, will sleeping on barley straw.

SYMPTOMS.—The disease begins with irritation of the skin, which causes the dog to be continually scratching; from inflamed patches a serous fluid exudes, which mats the hair and forms scabs; these fall off together, leaving the skin bare, inflamed, red and discharging a thin, watery fluid. This fluid dries in thin scales, which cause considerable irritation. The scabs and scales are scratched and rubbed by the dog, and are thus aggravated till pustular and vesicular eruptions give the appearance of general ulceration. The patch usually occurs on the back, the inside of the thighs, and the scrotum.

In other cases, in fat, over-fed animals, the skin is devoid of hair, is greatly thickened (especially above the neck or before the tail), and is almost devoid of sensation. Pinching affords pleasure instead of pain. The dog is very foul, and smells very offensively; the skin is wrinkled, chapped, cracked, ulcerated, emitting disgusting serum or pus; thick, yellowish crusts are formed; and the dog lies dull all day long, sleeping, licking, scratching, biting its sore places, a disgusting object to look at.

The disease may be confined to certain parts, when it receives the name of the part attacked. In sporting dogs there is frequently an eczematous eruption between the toes and at the roots of the nails, which causes redness, swelling, and tenderness of the feet, together with lameness.

Puppies almost invariably inherit the disease when it has occurred on one of the parents.

As it is a constitutional disease, its duration is uncertain, its cure difficult, and its return probable.

TREATMENT.—In old cases, give the Specific I.I. each morning and the Specific J.K. at night, and anoint, once per day, the sore, rough or scabby places with the VET. CURE OIL. In urgent recent cases, the Specifics above referred to may be given, four doses in a day. But in general the treatment first named will suffice.

ACCESSORY MEANS.—Strict attention must be given to diet; flesh must be utterly prohibited, except in the case of weak puppies, or when the disease has occasioned great debility, and then broth will be better than solid flesh. To gross dogs a few days' abstinence will do no harm; they may thus become willing to take boiled rice, which should be offered fresh every day; but if declined, withdrawn at once.

If the dog refuse to eat more than three days, an ounce or two of meat (according to his size) may be given to keep him alive, without satisfying his hunger. Vegetable or farinaceous food should still be offered sparingly, and when taken, the morsels of flesh should be discontinued. Cleanliness is essential. The sores should be gently washed with tepid water, and immediately dried. The dog's bed should be repeatedly changed, and his kennel well ventilated; he should have free, moderate exercise in the open air, and be fully supplied with fresh water.

Boils—Furuncles.

Boils, which may appear on any part of the body, are small, round, red, hard, painful tumors, with raised centers, from which they suppurate. When ripe, the boil should be opened and the pus pressed out. Warm fomentations will hasten the ripening.

TREATMENT.—Give Specific A.A., for fever and inflammation, a dose three times per day, one to three drops, according to the size of the dog. If the boil is red and painful, apply the VET. CURE OIL two or three times per day.

Warts.

These excrescences are not very common. They may occur on the eyelids, on the lips and mouth, on the mucous membrane of the prepuce or vagina, occasioning discomfort, irritation, and sometimes inflammation, with its consequences. They are best destroyed by ligature.

TREATMENT.—The Specific I.I., a dose, according to the size of dog, given daily, often causes their disappearance. They might also be touched occasionally with the VET. CURE OIL.

Louse—Tick—Flea.

The dog louse (*trichodectes latus*), the dog tick (*ixodes ricinus*), and the dog flea (*pulex canis*) are sources of no little torment. They cause considerable irritation, which induces the dog to scratch and rub himself; small pimples are formed, their heads are rubbed off, serum exudes, perhaps matter, and thus sores are produced. Lice are found in every part of the body, but particularly on the head and about the eyes and lips. They do not live on man. Ticks do not infest house dogs.

TREATMENT.—There is no cure, save by killing the parasites. The dog should be washed with warm water and soft soap, rubbed *into the skin*, thoroughly cleansed with tepid water, and dried by friction before a fire. When dry, the coat should be sprinkled with camphor tincture, and carefully combed and brushed to remove the eggs which adhere to the hair. The ears, eyelids and lips should receive special attention. The process may be repeated two or three times. But a free rubbing with the INSECTICID OIL, to be had of this Company (see advertisement page 30), will drive away the pests. Specific I.I. may be given internally, while the VET. CURE OIL is applied externally. The eruption will generally disappear with the parasites. The bedding, etc., should be wholly destroyed, and the sleeping place cleansed with sulphurous or carbolic acid.

Mange.

Mange is quite common in dogs, especially those that are over-fed, indolent, and have not particular attention paid them. It is induced by confinement

in a close or dirty kennel, certain kinds of food, indolence, too much food and too little exercise, starvation; or it may be taken by a healthy dog from a mangy one, or transmitted from a mother to her puppies.

SYMPTOMS.—It may be either dry or moist; the skin is itchy; the dog always rubbing himself, so that the skin is bare and red in different places; along the back, small reddish pimples arise, which are afterwards covered with branny scales. In the moist form there is swelling, redness of the skin, and then secretion of thick puriform mucous, finally formation of matter and thick scabs. The dog becomes thin, low-spirited, and finally dies, unless relieved.

TREATMENT.—Give the SPECIFIC for MANGE, I.I., three or five drops, according to the size of the dog, night and morning.

Apply the MANGE LOTION (see page 30) thoroughly night and morning.

Sore Feet.

These may be occasioned by injuries, long traveling over rough or frozen ground, or in very dry weather.

SYMPTOMS.—The foot is swelled, and small, hard, painful lumps are felt in it; there is much pain, and the animal cannot bear its weight upon them. The skin becomes red, and the nails fall off. There is usually considerable fever and no desire to eat.

TREATMENT.—Bathe the feet three or four times per day in the MARVEL, or apply the VET. CURE OIL, and give, morning and night, a dose of three or five drops of Specific A.A.

If matter forms, a poultice may be applied, and the abscess afterwards opened.

Chest-Founder, Kennel Lameness.

This is a rheumatic complaint not unfrequent among dogs, and is usually the result of exposure to cold and damp, especially when the animal is warm, or has been over-heated.

SYMPTOMS.—The animal is lame and stiff, especially in the fore legs; the pain may be so severe that he cannot move them. There is pain when the shoulders and sides are pressed upon. There is fever, hot skin, quick pulse, rapid breathing and loss of appetite.

TREATMENT.—The Specific A.A. should be given at first, a dose of three or five drops, four times per day, while the fever and heat are violent, after which the Specific B.B. may be alternated with it, at the same intervals, until the animal is cured.

Fractures.

Simple fractures of the leg are very readily cured in young and vigorous dogs. It may be readily known by the distortion of the limb, by the ends of the bone grating upon each other, lameness, etc.

TREATMENT is very simple. Extend the limb and put the bones in place, and apply splints with a firm bandage, wetting the limb with the MARVEL. Examine them from time to time to see that they are kept in place. After three or four weeks they may be removed, and the animal trusted to use its limbs. Give the Specific B.B. night and morning for a few days, three or five drops, according to the size of the animal.

Hemorrhage.

Occasionally dogs discharge blood from the nose, mouth or anus, after a long run, after going uphill, or after blows or other external injuries. Consideration should be given to the specific cause. Arnica,

internally and externally, will often be found curative, or a dose of Specific A.A. For an alarming hemorrhage, give a spoonful of the MARVEL OF HEALING, and repeat it every hour if necessary.

Foreign Bodies in the Œsophagus—Choking.

A dog sometimes swallows a bone or piece of gristle, which sticks in his throat. He begins to cough, is restless, cannot swallow, puts his paw to the side of his head as if to pull something away; the eyes are red and prominent; mucous escapes from the mouth and nose.

TREATMENT.—The mouth should be opened as wide as possible, and warm water poured in till the dog vomits, when the intruder may come away; or it may be removed with a forceps. But if removal in this direction be impracticable, an attempt may be made to push the foreign body into the stomach with a piece of whalebone, cane or willow, protected at the end with a piece of sponge dipped in oil. If this fail, it will be necessary to open the œsophagus. If this tube has been injured, two or three drops of arnica should be given in water, twice a day. For several days, milk or soup diet only should be given.

PART VI.

DISEASES OF POULTRY.

Doses and Methods of Preparing the Specifics for Use.

ONE DROP OR PART of a DROP is quite sufficient as a dose for an ordinary fowl. One drop of any specific put into a teaspoonful of water or milk, and this put into a teacup so as to *be thoroughly mixed*, is a sufficient dose for FIVE FOWLS of full size, or ten chickens.

WHERE a FLOCK or several fowls are to be treated, drop ten drops of the proper specific into a cup, to which add ten teaspoonsful of water, milk or curdled milk, and after *stirring it thoroughly* with a perfectly clean spoon, mix this with the meal, grain or bread, or whatever food is given them. If the quantity of fluid should not be sufficient to properly moisten the food, more can be added without detriment, provided the mass be *thoroughly stirred and mixed* before wetting the food. This would be enough for fifty fowls. Some will get more and some less, of course; but each will probably get enough to answer a curative purpose, and none will get so much as to be injurious.

If a bird is so ill as not to eat or drink, and the Specific must be given by hand, the mouth may be gently opened and two or three drops of the mixture,

made in the proportion of one drop of the Specific to a *teaspoonful* of water, may be turned down, or the fluid may be turned on soft food and thus given, at the intervals mentioned under each separate disease.

Bread soaked in milk or water, cooked cracked wheat or curdled milk is, in general, the best food for sick or ailing fowls.

Cold and Cankered Mouth and Throat.

The more common results of a cold in fowls is a peculiar condition of the head and eyes, which at first appear red and irritated about the eyes and mouth, which by degrees become swelled, and then the nose, mouth and throat become ulcerated or filled up with canker. Sometimes the eyes seem affected with inflammation and partial blindness, and there is difficult breathing or rattling of mucous or canker in the throat. At times the entire head is swelled, and the nose and throat are filled with thick, cheesy mucous or canker, or pustules appear on the sides of the head, the wattles and ear lobes. As the pustules break or fall off, scales form on the surface. In its more advanced stages the disease is often termed "roup."

The Specific A.A. is required at first, in the more inflammatory stages. But after the canker has fully formed, the Specific C.C. is the proper remedy. The medicine should be given four times per day, or every say four hours, or, for slight attacks, morning and night. A wash of salt and vinegar applied to the ulcerated or cankered surface with a suitable swab, is sometimes recommended. But if the disease is cured by the proper specific, the ulcer and canker will disappear.

Apoplexy and Paralysis

May arise as a result of over-feeding or too rapid change of condition. An unsteady gait and drooping wing is the warning. If it progresses, there may be entire loss of power or unconsciousness. A dose of Specific A.A. will afford prompt relief.

Black Rot

Is known by a blackening of the comb and swelling of the feet and legs. The Specific C.C., given three times per day, is the proper remedy, and given early may avert the disease.

Bronchitis

Is known by the frequent coughing, and if observed, a more frequent respiration than in health, and generally a well-marked rattling in the throat may be noticed. In the more advanced stage there is discharge, as in catarrh, or a slight discharge as it gets well. The Specific A.A. will promptly cure; give two or three times per day.

Bumble Foot

Occurs mostly in the large breeds of fowls, and is supposed to be caused by bruising the foot when alighting on a hard surface, or in resting on a small or uneven perch. There is a swelling or corn in the bottom of the foot, which softens, becomes ulcerated, forming a putrid surface or sore. Remove the putrid or decayed matter carefully, and dip the foot in a solution of (blue vitrol) sulphate of copper, made by dissolving one-fourth ounce of blue vitrol in a quart of water; this may be repeated two or three times, and give also, internally, the Specific J.K., or if the foot is hot and swelled and not yet maturated, the

Specific A.A. may dissipate the swelling without its maturating. The bird should be kept on the straw and not suffered to rest on the perch.

Canker or Ulceration.

This disease differs from roup in there being no discharge from the nostril. Ulcerations are found in the mouth, involving the tongue and throat. The fowls should have only soft feed, and be kept in warm, dry, clean quarters, and should have the Specific C.C., three times per day.

Cholera

Usually makes its appearance as a diarrhea, with frequent greenish droppings and violent thirst, and extreme weakness and rapid failing of strength; the birds staggering or falling about, and often attacks of cramps. There is generally also an anxious look in the face. The disease is sometimes rapidly fatal, death occurring in one or two days.

It is generally admitted to be caused by confining too many birds in close, limited quarters; insufficient shade; stale, unhealthy drinking water; exposure to the hot sun; feeding on grass-runs covered with droppings, and the want also of a regular supply of fresh green food. The disease rarely or never occurs where fowls have a liberal range, clean runs, good water and green food daily.

TREATMENT.—The flock should at once be removed from their unhealthy surroundings, and be given a clear, ample range, and should only be allowed a wholesome food of boiled milk thickened with flour, or soft bread soaked in boiled milk, or other suitable food, and should have the Specific F.F., every three hours in urgent cases, or three times per day to those who are yet able to eat.

Catarrh.

A catarrh is usually the result of a common cold, and is known by the discharge of mucous from the nose. If neglected, it may end in "roup." The bird should be removed to a warm, comfortable place, and given the Specific C.C., three times per day, with bread soaked in milk as food.

Consumption

Is sometimes observed in fowls, manifested by cough, wasting of flesh and great weakness, notwithstanding good feed. It may arise from breeding too much "in and in," but most commonly results from a neglected cold and bad surroundings. The proper treatment is, give the bird good care and feed, and the use of Specific E.E., three times per day.

Cramp.

Chickens are sometimes subject to this disease, especially in damp, cold weather. The toes ars first seen to be bent under, and by degrees they walk on the knuckles or outside of the foot, and the birds often squat on the hock. If it is the result of a cold, and the chickens are feverish, as is generally the case, remove them to a comfortable place, and give them the Specific A.A., three times per day. If it fails after a day or two, try the Specific J.K. If the toes are badly cramped, they may be washed in warm water and gently opened and kneaded by the fingers, and afterwards be wiped dry.

Crop Bound.

We should distinguish whether the over-distention of the crop is from excessive drinking, and caused by a peculiar feverish condition, or from the bird

gorging itself with grain, tough meat or bone too large to be digested. When the crop is so distended with hard food or other substance, the outlet is narrowed or entirely closed, so that mechanical manipulation may be necessary to cause its passage. While in the case of distention by fluid the distention will disappear and the unnatural craving for drink will yield to a few doses of the Specific A.A., given at intervals of a few hours.

Where the crop is distended with hard food, and is not passing off, and help is required, pour some milk-warm water down the throat, and then, holding the head downward, quietly manipulate or knead the distended crop with the hand, so as to soften the mass. After the mass has thus been carefully softened, pour down a large teaspoonful of castor or sweet oil, and the mass will be gradually worked off. Food should not be allowed for some time. Give also the Specific J.K., for indigestion, two or three times a day, which may be continued to entire recovery. In many cases the use of the Specific J.K. will be successful without the use of any other means.

Debility Drooping.

Occasionally, without apparent cause, except from long continued fright, long journeys, exhibition or other unnatural condition, the bird droops, mopes about, becomes debilitated, and may die without apparent disease. Give first the Specific A.A., for fright or excitement, morning and night for three or four days, and then the Specific J.K., for indigestion and debility, for some days, in the same manner, and the two may be thus used alternately if needful.

Diarrhea and Dysentery (Scouring)

Is not uncommon among fowls, caused usually by improper food or sudden changes of weather, or severe exposure. In diarrhea the droppings are only too frequent, watery, scalding or excessive, with consequent drooping and wasting of flesh; while, if this condition is unchecked, the discharges become bloody or mingled with blood and mucous, forming a real *dysentery*. This latter form of the disease is said to be contagious, and requires that the diseased birds should be separated from the flock and the dead ones buried deeply, far away from the yards or pens of the flock. The treatment is the same; the Specific F.F. should be given, three or four times per day. The food should be boiled milk thickened with flour, and well cooked, in the worst cases, or good bread softened in scalded milk. Of course the birds should have a clean, dry and well littered and sheltered place.

Egg Bound.

Sometimes hens are unable to drop the egg from its unusual size. This is usually manifested by the hens coming off the nest and moping around with the wings down and in evident distress. A large spoonful of castor or olive oil often relieves, to which should be added a dose of Specific G.G. Should this fail after an hour, bathe the vent with warm water, and then with a feather dipped in oil, lubricate or freely oil the passage or viaduct, taking care not to break the egg. Should the egg passage be ruptured or protruded, the Specific I.I. may be given, one or two doses, to promote the healing.

Eruptions, or Scaly Legs.

Fowls are at times subject to eruptions, sometimes like a whitish, bran-like scurf over the head and body; or a rough scurf on the legs and toes like scales. These eruptions are usually the result of confinement in insufficient, damp, wet or muddy runs, and they may, in extreme cases, be infectious, or be communicated from one fowl to another. The internal use of Specific I.I., given morning and night, will insure a cure if the birds are given good wholesome food, and have a clean run of grass and suitable shelter. If the eruptions are unsightly, a little plain sweet oil, applied with a feather, will effect their removal, but the cure must be by the use of the specific given in the feed.

Feather Eating.

This unnatural appetite, mostly observed in the hen, is the expression of some chemical want in the system, which, not satisfied in the food or drink of the fowl, manifests itself in picking and eating the feathers. Whatever supplies this want will relieve the expression of it, or, in other words, cure the habit. To this end the birds should have good feed and a grass run, if possible. If not, fine grass should be chopped up and given them, as also green food. *Bones* should be burned in the fire, then pounded small and put within their reach. This will supply the carbonate of lime, should that be wanting, and an occasional feed of wet-up bran will supply the silex, should the desire arise from deprivation of that. Some animal food, well peppered, may also be used advantageously. Give also the Specific J.K., morning and night. These hints and measures will be sufficient to ensure the breeder or fancier against loss from this source.

Fractures.

Broken wings or legs in fowls may be set without much trouble, if the fractured ends of bones are brought together and secured. The leg or thigh may be held straight, with the broken ends neatly in position, and a rag, or even paper wet in white of egg, carefully wrapped around it several times. The white of egg hardens as it dries, and furnishes a sufficient protection until the callus is formed. Broken wings are best secured by tying the feathers firmly together about an inch from the end, after having put the fractured ends neatly in place.

Frost Bites.

If the comb or wattles are frost bitten, they should be at first rubbed with snow or icy cold water, until the natural color and suppleness is restored, and then an application of the VET. CURE OIL, or if you have not that, the MARVEL OF HEALING in fluid will do. Two or three applications of either will suffice, the oil being every way preferable.

Gapes, or Throat Worms.

This disease is so called from the peculiar action of the chickens who are affected with it. It is caused by the presence of a pale reddish worm, some three-quarters of an inch in length, which infest the mouth and throat, and of which from two to a dozen are found in a chicken, each usually doubled up. These worms are a species of *ascarus* or pin worms, and have been bred, like other *ascarus and strongylas*, in damp earth, and hence are found among chickens which are *bred in damp, moist soils*, and are rarely ever known when the birds have a *clean, high or gravel yard.* The spawn of these worms are deposited by myriads in the moist, unclean soil, are thrown out by the coughing and efforts of the

ones infected, and becomes developed in the most barren soil or in water, and thence transplanted to the crop with the feed, become developed in the throat of the chick. This is the most recent position of scientific knowledge on this subject.

The best method of cure is to remove, where possible, the chickens to a dry locality, and to give them the SPECIFIC for WORMS, D.D., morning and night. FEED THE FOWLS and chicks with *finely chopped* ONIONS OR GARLIC (*tops and bottoms,*) *mixed with their food.* Experience shows the good results of this thoroughly scientific—as well as practical treatment. To remove the worms from the throat, make a loop of one or two horse hairs, which thrust down the throat, and with a slight twist draw it out, bringing the worms with it. This may be repeated until the throat is cleared. Or a quill feather, stripped to within an inch or two of its end, may be dipped in a mixture of glycerine or oil, and petroleum, made in the proportion of three parts of oil or glycerine, to one part of petroleum. Dip the feather in the mixture, and in like manner pass it into and well down the throat, and with a twist bring it out with the worms adhering. The used feathers and remaining oil *should be burned* to destroy the larvæ of the worms, and fresh feathers used freely, so as not to spread the worms or their larvæ.

Gout or Rheumatism

May be distinguished by the birds being lame, walking with difficulty and sitting about, and on examination the legs or thighs will be found hot and feverish; or in cases of longer standing, there will be evident stiffness of the joints and weakness of the legs, and in some cases contraction of the toes, which indicate cramps. The bird should be kept in a

comfortable, dry place, and the Specific B.B. given it three times a day. It is produced by exposure to cold and wet, or to sudden change of temperature.

Leg Weakness

In large breeds of fowls, and especially when being bred "in and in," so that the stamina of the system is lowered, there is a deficient growth of bony matter, and the birds are weak, squatting around or walking on their hocks. It may be remedied by giving the Specific J.K., morning and night, and bones or oyster shells should be burned in the fire, and then pounded small, and the dust occasionally mixed with the food or placed where the fowls have access to it. This will increase the deposit of ossific matter and impart strength to the legs.

Giddiness,

Which is liable to occur in over-fed birds, if suffered to continue, may result in apoplexy. A dose or two of the Specific A.A. will equalize the circulation and remove the difficulty and danger.

Lice.

This is liable to be a terrible pest when large flocks are overcrowded, or have insufficient space, unless extra care is taken in cleanliness and thorough ventilation. The entire quarters, henhouse, roosts and yard fences should be thoroughly cleaned and whitewashed, and all the waste straw, chaff and manure removed, two or three times per season—certainly spring and fall. After having removed and burned the waste straw and litter, the henhouse and roost should be thoroughly fumigated with sulphur. In order to do this effectually after cleaning out all the rubbish, take an old iron pot or other suitable

iron or earthen vessel, and place in the bottom of it a half pound or pound of *sulphur*, either powdered or roll, and on this lay a red hot iron. After having placed it in the position best calculated to fumigate the building or roost, and close the doors and openings as far as possible. Be careful not to inhale the fumes yourself, and see that no poor chicken or other animal is inclosed so as to be suffocated, the lice being the only objects intended for the fumigation. This being done, and a new coat of whitewash, covering everything, and fresh straw or hay for the nests, will make all sweet and wholesome again. When sifted coal ashes or wood ashes can be had and mixed with the sand, in which the birds wallow, lice will not trouble them, and the more so if some *flour of sulphur* is occasionally thrown into the mass. For an individual bird troubled with these vermin, the INSECTICID OIL applied along under the wings once a week will remove the pests.

Indigestion—Loss of Appetite.

If, as sometimes happens in consequence of overfeeding or the use of too highly seasoned food, fowls lose their appetite, and the digestion and thrift is impaired, a change to soft, well cooked food, and the use, night and morning, of the Specific J.K., will soon correct the difficulty.

Liver Disease.

This is a more formidable complaint, mostly observed in cold, damp localities, and rarely when the surroundings are dry and pure. Artificial enlargement of the liver is produced in geese by confining them in dark cellars; and fowls that have indigestion from over-feeding in similar conditions, will have liver disease with enlargement of that organ, a

dull, stupid appearance and a yellowish tint about the head and comb. It may be cured by giving the Specific J.K., morning and night, or, in obstinate cases, giving the Specific C.C., in like manner. The bird should have soft or cooked food and a dry situation.

Moulting.

We should take into consideration the great drain upon the system of fowls in moulting. Not only are the ordinary wastes of the body to be maintained, but the old summer coat of feathers is to be discarded and an entirely new one to be produced, involving in its growth all the essential elements of which the feathers are composed. If these substances —lime, carbon, sulphur, silex, etc.—are not to be had in the food provided for them, or are imperfectly produced or eliminated, the work drags and the organism suffers, and waste of flesh, poverty of the system or illness is the result. Hence it is a wise precaution, during the season of moulting, to allow the flock a more generous supply of food, and of better quality than usual, and to exercise more than ordinary care in housing and shelter. Fowls that have fair feed and a reasonable range will rarely require special care, but those confined are more apt to suffer. Any stimulating food is of advantage. Hemp seed is very beneficial, and iron is invaluable. An *acetate* of *iron* may be readily made by putting some nails or other bits of iron in *cider*. This, after standing a day or two, may be used in mixing the feed. More cider may be added as required, and so the cider and iron may be kept and used during the entire moulting season. The Specific I.I. is the proper remedy, and should also be given two or three times per week, or even more frequently if the birds are suffering much.

A little care and attention in this respect will shorten the period of moulting and bring the birds out in better health and vigor and better plumage.

Pip or Chirp.

Young chickens are affected by a peculiar form of disease termed pip or chirp, from the short, spasmodic chirups which they make during the complaint. The chickens mope about uttering this peculiar cry, and seek refuge in solitary places, as it is the instinct of animals and birds to pick at, maim or destroy the sick or maimed among them. The chicken is hot and feverish, although trembling violently, and they are extremely tender on being handled, and soon a dark-colored, dry, horny scale will be found at the end of the tongue, and the beak may turn yellow at the base; the appetite fails and the plumage becomes ruffled, and they gradually sink and die. It is doubtless caused by exposure to wet weather, as the light down is easily saturated, and is long in drying. The Specific A.A. may be given at first, one or two doses, and afterwards the Specific J.K., three times per day. The removal of the scale at the end of the tongue is of no consequence. That is not the cause of the disease, but the result, and the tongue will come all right so soon as the chick is restored in his circulation and digestion. Of course the birds should be well housed and fed on soft food.

Roup.

Almost all forms of chronic catarrh in fowls go by the name of roup. It usually begins as a severe cold, caused by exposure to cold, wet and damp. There is discharge from the nostrils, at first of thin mucous, and which soon becomes opaque, and even offensive, and the entire cavity of the nose may

become filled up; froth and mucous fill the inner angle of the eye, the lids are swelled and often the eye-ball quite concealed, and in severe cases the entire face is considerably swelled. It is said to be contagious, but is probably only so in extremely virulent cases. But the fact that a flock of fowls are exposed to similar disease-making conditions, and that many are taken nearly at the same time, would countenance the idea of its contagious character. The causes of the disease should be avoided by providing shelter for chickens during the cold, chilly fall nights, and not permitting them to wander around without feed in the cold, raw mornings. A plentiful supply of nourishing food and comfortable shelter when sudden cold changes of weather occur, will do much to prevent the appearance of this disease and the consequent loss. The iron and cider with the food will be useful, and onions cut up fine and mixed in the soft feed, is also an invaluable agent for fowls affected with any form of roup. The Specific A.A. is the proper remedy, two or three doses at first, during the inflammatory stage. Then the Specific C.C. is the proper remedy, and may be relied upon for a cure. Give it as often as three, or even four times per day, in extreme cases. Of course the severe cases should be well housed, have warm and dry lodgings, free from expcsure to open windows and cold drafts of air, as the bird is liable to new chill from fresh exposure. Washing the head and syringing out the nose, and washing the throat with salt and vinegar, or even with water and castile soap, is rarely necessary and really of very little consequence. As the catarrh passes off, the secretions will become healthy and natural, and all these discharges disappear.

Rump-Ail, or Wry Tail.

These are conditions arising from faulty organization or insufficient keep, and have for symptoms constipation, drooping head, ruffled feathers, or the tail carried to one side. In some cases a swelling appears upon the rump, which may suppurate and form an abscess, which had better be opened if matter has formed. The Specific J.K. is the proper remedy, and may be given two or three times per day. Where such conditions appear at all frequently in a breed of fowls, it indicates an inherent weakness, and the breed had better be changed or crossed with more vigorous stock.

Soft Eggs

May be a sign of over-feeding, but are more commonly from the want of material of which to form the shell—lime, starch, sulphur, etc. The flock should have an occasional feed of mashed potatoes and lime; old mortar, burnt oyster shells, pounded up, should be placed in reach. An occasional dose of Specific J.K. will be beneficial.

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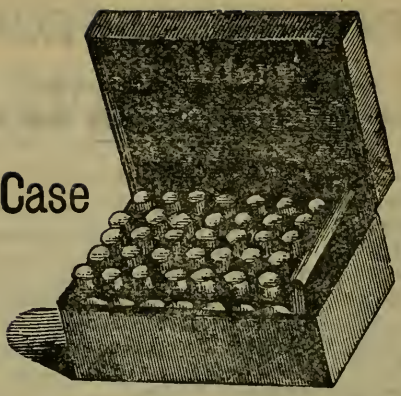

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Dr. Humphreys has used in his extensive practice for many years, particular prescriptions, which have proved so uniformly curative and are so often called for, that he has been induced to put them up in popular form, with full directions for use, and to catalogue them as his "Special Prescriptions," as follows:—

Special No. Seven.—For the cure of **Chronic Cough and Lung Disease;** Bronchitis, Weakness and Debility; Emaciation; Pain in the Side or Chest; Pulmonary Weakness.

Special No. Fourteen. For the cure of **Chronic Eruptions;** Eczema; Tetters; Salt Rheum; Scald Head, Itching, Inveterate Herpes, Dandruff, Pimples in the Face; Chaps; Unhealthy Skin.

Special No. Nineteen—Chronic Nasal Catarrh; Ozæna; Profuse and even Offensive Discharge; Accumulation of Mucous in the Nose or Throat.

Special No. Twenty-seven.—Disease of the Kidneys; Degeneration and Bright's Disease; Uræmia; Enlarged Prostate; Catarrh of Bladder.

Special No. Thirty.—Disease of the **Bladder** and **Urethra;** Too Frequent Burning or Scalding, Inability to retain at night or by day; Chronic Urinal Debility, Constitutional or from Infirmity.

Special No. Thirty-three.—For **Epilepsy;** Falling Sickness; and St. Vitus Dance.

Special No. Thirty-six.—For Disease of the **Bones;** Enlarged, Inflamed or Suppurated Glands; Ear Discharges; Old Eruptions; Chapped Hands; Offensive Sweat.

These are put up in neat packages of Two Large Six Drachm Vials each, with full directions, and sent free to any address on receipt of the price, **$2.00.**

Special Cholera Case.—For **Prevention and Cure,** Three Vials, in a neat case, with Pamphlet and full directions for use.....**$2.00**

In Large One Ounce Vials..... **3.00**

NERVOUS DEBILITY

Is known by a weak, nervous, exhausted feeling; a lack of animation or energy, often with confused head, depressed mind, weak memory, or with debilitating, involuntary discharges—the consequence of excesses, indiscretion, or mental overwork. This condition finds a sovereign cure in

HUMPHREYS'

Homeopathic Specific

NO. TWENTY-EIGHT.

It tones up the system, dispels the mental gloom and despondency, restores vitality, arrests the drain and rejuvenates the entire system. Perfectly harmless, been in use twenty years, has restored thousands, and is the always efficient and safe remedy. Its highest praise is that it is extensively imitated. It is especially efficient for the YOUNG and INDISCREET, and the OVERWORKED, OVERTAXED, or CARE-WORN in active or advanced life.

PRICE.—$1.00 per single vial; or $5.00 for a Package of Five Vials and a $2.00 Vial of Powder, which is important in old, or serious cases.

Sold by ALL Druggists, and sent post or express paid, on receipt of price. Address,

HUMPHREYS' HOMEOPATHIC MEDICINE CO.,

COR. WILLIAM & JOHN STS., NEW YORK.

HUMPHREYS'
MARVEL
OF HEALING
Extract OF Witch Hazel.
TRADE MARK

HUMPHREYS'

MARVEL OF HEALING.

A Pure Distillation of Hamamelis.

Is the Indispensable Medicine for Families.

It is always safe—always reliable—never injurious.

It Heals the widest variety of Accidents or Injuries—Wounds, Bruises, Contusions, Sprains or Lacerations.

It is the greatest Styptic or Stauncher of Bleeding known.

It arrests Nose Bleed, Spitting of Blood, Bleeding Lungs, Bleeding Gums, Vomiting Blood or Internal Hemorrhage.

It is the only always sure and infallible Remedy for Piles.

It is the only cure for Varicose Veins.

The Sure Remedy for Toothache, Earache and Neuralgia.

The Cure for Rheumatic Pains, Lameness, Soreness, Stiffness.

The Cure for Gravel, Strangury and Kidney Disease.

For Burns, Scalds and Sunburns—the Marvel of Healing.

For Diarrhea and Chronic Diarrhea—always curative.

For Catarrh, Mucous Discharges—Invaluable.

For Ulcers, Sores, Boils, Corns and Felons—Unequaled.

For Excoriations, Chafings and Soreness—Invaluable.

As a Toilet Article for Shaving, Bathing, etc.—Above Praise.

It has been in popular use for Thirty Years.

It is prepared by a Scientific and Experienced Physician.

It is for External and Internal Use—to Apply and to Take.

Price, 6-oz. Bottles, 30 cts.; pints, 60 cts.; quarts, $1.

It is Sold by all Druggists.

HUMPHREYS' HOMEOPATHIC MEDICINE CO.,

Cor. William and John Sts., New York.

HUMPHREYS' WITCH HAZEL OIL

—OR—

PILE OINTMENT.

FOR PILES THIS OINTMENT HAS NO EQUAL.

This OINTMENT is the triumph of Scientific Medicine. Nothing has ever been produced at all to equal or compare with it as a curative and healing application. The virtues of the **Witch Hazel** have been long known and celebrated as a healer and pain curer. When combined and applied in the form of an oil, its curative effects are indeed marvelous.

Piles, Fissures, Ulcerations, Eruptions, Itching or Bleeding of the Rectum. For these, or any of them, this Oil is infallible. The relief is immediate - the cure certain.

Burns, Scalds and Ulceration and Contraction from **Burns.** The relief is instant, and the healing of the ulceration and softening of the contraction is wonderful and unequaled.

Cancers, Malignant, Painful or Corroding Ulcers, Carbuncles and Boils, are at once relieved of the DARTING, EATING or CORRODING PAINS, by its application.

Old Sores, Indolent Ulcers and Fistulas, Lacerated, Torn or Cut Wounds, or Ulcers resulting from them, are promptly healed up and cured.

Salt Rheum, Tetters, Scurfy Eruptions, Chapped Hands, Fever, Blisters, Sore Lips, Corns and Bunions are promptly relieved and often cured like magic.

As a **Liniment for Rheumatism, Lumbago, Pains in the Back Chest, Sides or Limbs;** for **Inflamed or Caked Breast, Sore Nipples, Sore Feet, Corns, or Chafing between the Toes** and **Ingrowing Toe Nails,** IT IS INVALUABLE.

☞ As a **Dressing for Torn, Lacerated, Cut or Bruised Wounds or Injuries; to Arrest Inflammation and Promote Healing,** it is unequaled. The **best Surgeons** use it exclusively **as a Dressing** after all Surgical Operations.

Please read what those say who have used them.

BALTIMORE, MD., Feb. 14th, 1882.

I have used Humphreys' Veterinary Specifics two years and find that they do all that is claimed for them. I had thirty horses sick with pink eye, and did not lose a horse. I find for colic, either spasmodic, flatulent or renal, the Specifics, given according to the directions in the book, will relieve every time, quicker than any other medicine I have ever used. I use them in every case, and nothing else.

ANDREW JACKSON,
Supt. Monumental Livery Stables, 35 & 36 North St.

DETROIT, MICH., Dec. 27th, 1884.

I have used Humphreys' Veterinary Specifics for about five years. Have had pink eye, epizootic and colics, &c., in my stables. The Specifics proved good in all cases; they are, I think, the best medicines I ever used. Would not be without them in my stables at any price. JOHN STUNBY,
Livery, No. 17 Lafayette Avenue.

CHICAGO, January 24th, 1884.

Since having had charge of the horse department of the North Chicago City Railway, I have treated with Humphreys' Veterinary Specifics the various diseases incident to horses, and have had some very severe ones, but have been almost always successful. I had one very bad case of colic, so severe that I feared your Specifics were not powerful enough, and used allopathic medicines. The horse died, and I am now convinced I could have saved him by your treatment. Since that time I have used no other medicines and have cured many bad cases of pink eye, distemper, indigestion, colic and colds. I shall use no other medicines so long as I can get yours, for they are the best in the world.

N. ATKINS, Supt. North Chicago City Railway.

CHICAGO, January 25th, 1884.

Two years since I bought a case of Humphreys' Veterinary Specifics, and during this time have treated very many cases of sickness among horses and always successfully. Mr. Thomas Donegan has a horse subject to colic, and I have treated him three times. On one occasion he was given up for dead, but by the use of your Specifics I brought him out all right. With my own horses I have met with some cases of lung fever, pink eye and colic, but had no difficulty in curing them, for they are so easily administered and effectual. It needs no particular skill to administer them, and your Veterinary Manual gives all necessary information.

ROBERT CHAMBERS, 317 Taylor Street.

Please read what those say who have used them.

Adams Express Co., B St.,
Washington, D. C., June 24th, 1885.

We have used in our stables Humphreys' Veterinary Specifics for over three years, and like them first-class; one horse with paralysis that we offered to sell for $20 to different ones to get him out of our way, not thinking he would ever be worth anything, was entirely cured by your Specifics, and could not be bought now for $300. In colics and other diseases it has prōven to be just as good, and we think them just as represented, and think they are the cheapest medicines we can get. Since we have used it our veterinary bills at the end of the year have not been one-quarter what they were previously, and our books will show it—and have lost less horses than we ever did before using the medicine; we will not be without it. GEO. S. SMITH, Stable Manager.

St. Louis, Mo., January 30th, 1885.

I have used Humphreys' Veterinary Specifics for the past four months in the stable of the Pacific Express Company, St. Louis, Mo., in almost every case that a stable of 100 horses are subject to. It has worked like a charm in 22 cases of pleuro-pneumonia. Colic under old treatment that required twelve hours treatment to effect a cure, if at all, can readily be cured in from thirty to forty minutes. In short, it has done wonders in all cases; and we have used them in very bad cases of sprains and found them prompt in action, and in all cases performing a cure. W. H. LEWIS,
Foreman of Stable.

Livery and Coach, 75 North Calvert Street.
Baltimore, Md.

We have used Humphreys' Veterinary Specifics with a great deal of satisfaction. But a short time ago, had a horse very sick with the colic—two doses entirely cured him. For coughs and colds it is equally as good. With pleasure we add to the numerous references given by others, and would like do see other horsemen using them.
JOHN WARD & BRO.

Buffalo, March 13th, 1885.

Please send me a price-list of Humphreys' Veterinary Specifics, as I am using a great deal of them; in fact, consider that we are the first to use them in this city, and find it is utterly impossible to get along without them.
L. A. DANIELS & SON.

Please read what those say who have used them.

PITTSBURGH, PA., April 4th, 1885.

I have used Humphreys' Veterinary Specifics for the past two years at our stables, and am pleased with them. I know they are by far the best remedies I ever used for colics, coughs, colds, chills, eruptions, fevers, and for stiffness. I know they are just as represented, and think I have treated some as sick horses as ever I saw, and live. Before I got them, time and again I was called from bed nights to attend a sick horse, not daring to trust any one else in the use of the old school medicines. Now our night-watchman can give and use the Specifics as any one can, and I have no fear for the results. Easy to administer, and for value as a curative medicine they, in my judgment, excel all others. They have saved us much time and trouble and hundreds of dollars. Every stable with horses should have them, and any one giving them a fair trial, using them as directed, will agree with me in what I say here, and that in a very short time, too.

C. SUMMERIL,
Supt. of Stock Oakland St. Railway Co.

BALTIMORE, MD., June 6th, 1885.

We have used Humphreys' Veterinary Specifics in the Adams Express Co. Stables for about three years and find them equal if not superior to any remedies we have ever used. They act well and leave no bad effects. JOHN HOOD,
Stable Manager, 205 W. Baltimore St.

BALTIMORE UNION PASS. RAILWAY CO.,
BALTIMORE, MD., June 16th, 1885.

We have used Humphreys' Veterinary Specifics for the last three years and with good success, we like them very much. Colics, fevers, coughs, colds, founders, &c., have been cured. We think it acts much quicker and leaves much better results than any medicine ever used. WM. CHOPE, Stable Supt.

WASHINGTON, D. C., June 27th, 1885.

We have used Humphreys' Veterinary Specifics for about twenty years. Pleurisy, pneumonia, colics, coughs, colds, rheumatism, in fact all complaints that horses are subject to, have been successfully treated by us with these remedies. A friend of mine at Uniontown after losing 10 cows with milk fever, came and got my stable case, and consulted your Vet. manual, and saved others that were sick, not losing a cow afterwards. I have recommended it to others, and it has in every case given them satisfaction, as well as myself.

HOLMES & SON.

Please read what those say who have used them.

BALTIMORE TRANSFER CO., June 10th, 1885.

I have used Humphreys' Veterinary Specifics for the past nine years in these stables and cannot say enough for them. I am satisfied when a horse dies under this treatment he could not be saved under any other, and hundreds are saved by them. I know they have been the means of saving the lives of many of ours, and the loss of many dollars every year. All sickness of horses have been successfully treated by me. So well do I think of them, I have sold to my friends about 40 cases of Humphreys' Veterinary Specifics, not to make one dollar on them, only that they too may use them—thereby saving themselves many dollars, and the suffering of the poor animals; and would say to those never having used them, do so and you will not regret it.

WM. BROWAR, Supt. of Stock.

COLUMBUS, O., March 9th, 1885.

I have used Humphreys' Veterinary Specifics for the past year, and I find them to be the very best remedies for horses that I have used. I have had several cases of colic, also kidney complaints and coughs, colds, &c., in which they have given perfect satisfaction. Any man of ordinary intelligence can use them. J. K. McDONALD.

ALLEGHENY, PA., April 1st, 1885.

We have used Humphreys' Veterinary Specifics for nearly two years past with satisfactory results. Our horses with colics have been cured in every case. Inflammation of the lungs has been cured by us; in fact, so far we have been successful in every case of sickness. We had one horse with the heaves; gave the Specifics A.A. and E.E. and he is now well; we have him yet. We have been successful in every case, and have not lost a horse.

HALLER, BECK & CO.,
Salt Manufacturers, 40 Beaver Avenue.

TOLEDO, O., Feb. 14th, 1885.

We have used Humphreys' Veterinary Specifics for the past three years, with most gratifying results. For colics, coughs, colds, &c., they are simply invaluable. Cured a bad case of nasal gleet in about six days. Have never yet failed to cure sickness when we used remedies as directed. They have been most invaluable to us, as any man of ordinary intelligence can use them. Our stable superintendent has always used them; we only at times look after the case.

WHITNEY & TRACY,
Wholesale dealers in Pine Lumber, 22 Erie St.

Please read what those say who have used them.

Livery Stables, 422-24, 8th St.,
Washington, D. C., June 20th, 1885.

We have used Humphreys' Veterinary Specifics for about two years. Before we began to use them we could not believe in them—but now are firm believers in them. One mare we had was sick with the colic, and taken out in a lot to die, as no one thought she could live; she then was given the A.A. and F.F., and in a short time she was all right. We could give many instances where the medicines have been equally as efficient, and can truly say "would not take one hundred dollars for our case of Specifics could we not get another," and would be glad to see the owners of horses use them.

FADELEY & BRO.

Washington & Georgetown R.R. Co.,
Washington, D. C., June 23d, 1885.

We have used in our stables Humphreys' Veterinary Specifics and say they are certainly good remedies. We like them very much. Colics, dropsy, pink eye, lung fever and bronchitis have been successfully treated. We are satisfied with the remedies and want no others.

CHARLES L. WRIGHT, Supt. of Stables.

Boston, February 14th, 1885.

Please send me two cases of Humphreys' Veterinary Specifics (black waluut, $7.00) by express. I want one and a friend of mine the other, as we have both used them, and they are the best medicines I ever used in forty years handling horses.

J. H. CARTER, 23, 25, 27 & 29 Berkeley St.

Toledo, O., Feb. 5th, 1885.

We have used Humphreys' Veterinary Specifics for four or five years, and consider them invaluable, and would not be without them at any cost. On transporting our fine sale horses we always have the Specifics on the car in case they are wanted. We think no livery stableman should be without them.

H. ARMS & CO.,
Nos. 188, 190 and 192 St. Clair Street.

I bought a case of Humphreys' Veterinary Specifics from your agent, and have used them with such good result that we have since invested in them in a larger way. They have given entire satisfaction. We have used them for a great many troubles, and the result was always good, and we can recommend them to all whom it may concern.

F. S. HANSON,
New England Mills, 145 & 147 W. Lake St., Chicago, Ill.

Please read what those say who have used them.

Balto. Livery, Sale and Exchange Stables,
Baltimore, Md., June 6th, 1885.

Humphreys' Veterinary Specifics have been used in these stables with wonderful results and think there is no remedies equal to them. All sickness that horses are subject to, have been successfully treated. Colics, coughs, colds, pink eye, and one case of quinzy that was very bad, and was not thought could live, was treated successfully; in fact, we know they are the best remedies ever used in our stable by far, and think no stable should be without a case of them.

JAS. W. HAHNE, Supt. of Stables.

Stewart's Central Stables,
Baltimore, Md., June 8th, 1885.

We have used Humphreys' Veterinary Specifics for at least five years, and have found them valuable remedies for the worst diseases.

JOHN STEWART.

Park Stables, 167 North Howard Street,
Baltimore, Md., June 8th, 1885.

I have used Humphreys' Veterinary Specifics in my stables for the past two years. I have great faith in them, was induced to use them by Mr. Hood of the Adams Express Co. I have not regretted it. I think them the best medicines I ever used; have used them for all kinds of sickness, and others that will use and give them a fair trial will not regret it.

ED. B. SCHMIDTS.

Wm. B. Salisbury, Foreman of Adams' Express Stables, says: "I have been in this barn for several years and always used allopathic medicines until your agent called upon me, some two or three years since, and induced me to try a case of your Veterinary Specifics. They have proved so successful in every instance that I think there are no such efficacious medicines as Humphreys' Veterinary Specifics. They are all you claim for them, and I will say that as long as I have anything to do with horses I shall use no other, and will recommend them to all persons having care of horses."

Fredericksburg, Iowa, Oct. 14th, 1891.

I am now and have been using Humphreys' Veterinary Specifics in my stable of 12 to 15 horses and find them just the thing. I purchase through S. J. Peterson, of McGregor, Ia.

C. H. SHERMAN, Asst. P. M.

Please read what those say who have used them.

Village Farm,
East Aurora, N. Y., Oct. 3d, 1889.

We have the greatest faith and confidence in Humphreys' Veterinary Specifics, as you of course are aware, from the large orders which we give you, and wish to obtain all possible knowledge in regard to administering them, and would consider it a favor if you would inform us of any new point which you may discover. C. J. HAMLIN, Prop'r,
Buffalo, N. Y.

Jonesburg, Mo., May 12th, 1891.

I am the first one in this part of the State to use the Humphreys' Veterinary Specifics, and when I went to our druggist to get him to order a batch of your medicines I had to guarantee to take all he didn't sell. Since his first order he has sent several. I give away to my friends the little books that come with each vial. The first case of colic I treated for a neighbor he stood back and laughed at the small dose when his horse was relieved. He said well, that beats any medicine I ever saw; got a bottle and went home. Last July we had a very bad wreck on our road, 15 cars of race horses going to Kansas City; two of them were completely demolished. I went down and called the attention of the bystanders to the fact that every man who had one or more horses had a case of your valuable Veterinary Specifics. When you read this I know you will be tired, but facts and Humphreys' Specifics are hard to get over.
THOS. VAN STUDDIFORD.

Walla Walla, February 18th, 1891.

I am now using your medicines exclusively with success and great satisfaction. I see in a little pamphlet wrapping one of your bottles that you send a copy of your Veterinary Book. You will oblige by sending me a copy.
L. J. STILMANT,
Box 219 Walla Walla (Wash.)

Toledo, O., February 7th, 1891.

I have used the Humphreys' Veterinary Specifics for ten years with the best of results. JOSEPH POPP.

Electric Motors & Light Machinery,
Wilmington, Del., Oct. 9th, 1891.

I have had four very sick horses since I got my case of Humphreys' Veterinary Specifics from you, and one a bad case of colic, and it worked like a charm, and I have had good results. I. F. BETTS.

Please read what those say who have used them.

JOHN V. FARWELL COMPANY,
CHICAGO, April 24th, 1891.

I cheerfully give my approval and endorsement for the beneficial results we have obtained in the last ten years in our stables of the Humphreys' Veterinary Specifics. No well regulated stable should be without a case of Humphreys' Veterinary Medicines. CAPT. A. PHILLIPS.

CHICAGO, April 23d, 1891.

We have used Humphreys' Veterinary Specifics for the last five years and have found them most invaluable to us.
HENRY FURST & CO.

FRANK PARMELEE'S OMNIBUS LINE, &c.,
CHICAGO, April 24th, 1891.

We have used Humphreys' Veterinary Specific for Horses for a number of years in Frank Parmelee's Stables with good results, and cheerfully recommend it as a good thing to have for all diseases in horses. THOMAS ENRIGHT,
Supt. Stable, cor. Clarkson & Franklin.

TOLEDO, February 3d, 1891.

We have used Humphreys' Veterinary Specifics and find them to be just what they are recommended to be.
FRED HILAMS & SON.

ELKHART, Mo., October 10th, 1891.

Please send me one bottle of Humphreys' Veterinary Specific A.A. as soon as can be done, as my cows have got the black tongue and my hogs have got the cholera, and I have used up pretty nearly all of my bottle. I think more of your medicine than anything I have ever got hold of.
MRS. MAHULDAH COMPTON.

EVERETT BROS., GIBSON & CO., COMMISSION MERCHANTS,
NORFOLK, VA., June 20th, 1891.

Humphreys' Veterinary Specifics are sold here and we use them with good results.
EVERETT BROS., GIBSON & CO.

SCHENECTADY STREET RAILWAY CO.,
SCHENECTADY, N. Y., June 7th, 1891.

Seeing your advt. in the *Sun* to-day, I ask that you send me a copy of your Veterinary Manual. We use Humphreys' Veterinary Specifics and find them very beneficial.
FRANK J. ARTHUR, Ass't Supt.

Please read what those say who have used them.

DEEP CREEK STOCK FARM.
NEW HARMONY, IND., Feb. 17th, 1891.

We use Humphreys' Veterinary Specifics in our stables, and by the special use of G. G. for barren mares (when the trouble arises from a too open condition of the part) have succeeded in making them breed. E. F. & H. P. OWEN CO.

MILLIS, MASS., Jan. 12th, 1891.

I have a stable case of Humphreys' Veterinary Specifics and use it a great deal. I have been very successful, so much so that the neighbors are calling me to see their stock.
FRANK E. COOK.

BRECKENRIDGE, MINN., Jan. 3d, 1891.

I ordered a stable case of Humphreys' Veterinary Specifics for my husband for a Christmas gift and it reached me on Christmas morning, he never had a present in his life he was so well pleased with. MRS. ADDISON HAMILTON.

NEW HAVEN, CONN., March 26th, 1891.

I have used your Specifics for five years with the best of results. I buy them of C. S. Lette, 297 to 303 State St.
H. W. LESSEY,
63 Greenwood Street.

PICKWICK STABLES,
SPRINGFIELD, MO., July 13th, 1891.

Is there any place here where I can buy Humphreys' Veterinary Specifics, as I need it in a hurry sometimes. I like it first rate, as you see. I use it altogether and have had good success. GEORGE D. McDANIEL.

CENTRAL AND PALACE STABLES,
BALTIMORE, MD., May 5th, 1891.

I have been using Humphreys' Veterinary Specifics in my stables for the past ten years and have found it very efficient and reliable and would not be without it.
COLIN STEWART, H. S.

SWEET BRIER STOCK FARM,
ELBA, HOWARD CO., NEB., Feb. 6th, 1891.

I have been using Humphreys' Veterinary Specifics with good success on colts with distemper. ED. T. COOK.

P. S.—I am working about 500 head of cattle and 80 head of horses.

Please read what those say who have used them.

New York, May 18th, 1891.

We have an order for some of Humphreys' Veterinary Specifics for the Governor of the Windward Islands, price to be 60 cents per bottle or less, and we presume you will allow us a liberal discount for export and cash in 10 days. If it does not make too large a package, kindly send to the office.

GILLESPIE BROS. & CO.,
Per T. A. Wetmore.

Western Stone Company,
Chicago, April 30th, 1891.

I have used Humphreys' Veterinary Specifics with good results for four years. WM. S. CRAIGMILE, Barn Boss.

Toledo, O., Feb. 6th, 1891.

I have used Humphreys' Veterinary Specifics with success in all cases in which I have tried it, especially Influenza and such diseases. It is invaluable to all horse owners.

J. S. KETCHAM.

Fall River, Mass., Aug. 19th, 1891.

I have used Humphreys' Veterinary Specifics for many years and am very much pleased with them. Please find check for $14 to pay for two cases. A. C. RICHMOND.

Toledo, January 26th, 1891.

We have used Humphreys' Veterinary Specifics and they have given entire satisfaction. SKEHAN BROS.,
143 Erie Street.

Toledo, O., Jan. 29th, 1891.

We have used Humphreys' Veterinary Specifics in our stables for a number of years and have found them very satisfactory. MACLAREN & SPRAGUE.

Dubuque, Iowa, May 21st, 1891.

We have used Humphreys' Veterinary Specifics and like them very much; we wish you would please send us the book you advertise in *Clark's Horse Review*. We have the largest barns in Iowa, and have in constant use 120 head of horses besides boarders; we have been in the livery business for twenty years. BRYNE BROS.

Elmer, N. J., May 26th, 1891.

I have used a great many dollars' worth of Humphreys' Veterinary Specifics for horses with success.

WILLIAM OLIPHANT, Box 66

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STABLE

HUMPHREYS' VETERINARY SPECIFICS.

CHART.

Entered according to Act of Congress, In the year 1882, by F. Humphreys, M.D.

SHORT DIRECTIONS FOR

Chill.—*Comes on after* exposure, cold draughts, too much cold drink, riding in a cold stream while perspiring, standing in damp and cold while hot.

Known by—Dullness, hanging the head, standing still, dull eyes, grinding the teeth, quick breathing—in some but case *panting*, pr kly coat, trembling, and even shaking, in repeated stacks, continuing from an hour to several hours, and is followed by hot fever and quickened pulse, or some inflammation.

Give—Specific A A every half-hour at first, then every hour, until all danger has passed away. Never neglect a chill, as it may develop into fever, pneumonia, bronchitis, rheumatism, or other severe diseases. Curing the chill you prevent these.

Influenza. *Comes on* as an epidemic, or from exposure to cold, damp air, when health suppressed perspiration.

Known by—Dullness, not little or no food, coughs and sneezes, watery discharge from the nostrils and eyes, the eyes which are red and swelled. Sometimes there is a chill, fever, quick breathing, sore throat, frequent cough, bound bowels, red eyes and dry nose.

Give—Specific A A at first every hour, and the F E three times per day. If the cough is frequent, or difficult quick breathing, alternate the specific F E with the A A, one dose every two hours, gradually winding up with the F E three times per day.

Epizootic or Canadian Horse Disease.—An

intensified form of influenza, always appearing upon atmospheric influences.

Known by—At first dullness, hanging head, cast fatigue, sweats on exercise, staring coat, *watery discharge from the nose* followed by hacking cough, or the cough may come on the first. Then pulse quick, nose and throat membrane red, junkish or iced color, ears and legs cold, discharge from the nose increased, yellowish green, throat sore, glands swelled, swallowing difficult, sometimes cases glands suppurate and discharge, or the wind-pipe and lungs may become involved.

Give—Specific A A at first every hour, which continue until the fever abates, or after twelve hours; alternate specific E E with the A A at intervals of three hours. But if the cough or difficult breathing is severe give the F E every two hours alone or in alternation with A A if there is yet decided fever. Complete the cure with F E in alternation with the H H three times per day.

Pink Eye. *Comes on* often in green horses brought from the country, lately appears as an epizootic, affecting large numbers

Known by Dumpish, dull, sick appearance; nose cinnudy, eyelids swelled puffed, vessels, inner lid, and corners of the eyes are puffed, somewhat closed, but shrunken in the light, tears trickle over the lid, and lumps of matter gum up the corners. He hangs his head; first one leg then the other swells from the fetlock up and along under the belly, rough hair, nose, nose and lips are dry, cough or wet, appetite and throat sore, tongue foul coated, saliva runs freely, or the mouth may be hot and dry, urine and dung scants, sometimes the glands of the neck or jaw are swelled, or may even suppurate: not unfrequently a cough. After a few days a discharge from the nose sets in, which is favorable.

Give—Specific A A, a dose every two or three hours for one or two days. If the glands under the throat are swelled and tender, alternate the A A with the C C. When the *legs begin to swell*, give the H H in alternation with the A A, a dose every three hours until cured. *If the lungs* become involved with cough and difficult breathing give the F E in alternation with the A A. Feed bran mashes, light hay—no grain, and don't torture him with exercise while the legs are swelled and hot.

Inflamed Wind-pipe or Larynx. *Comes on* from the same causes as colds.

Known by—Loud whistling breathing, even to danger of suffocation, or short and difficult breathing; cough, at first short and hard, becomes more hoarse and feeble; throat on the outside hot, painful and swelling; swallowing difficult, or impossible; pulse quick, hard and full, and skin hot.

Give—Specific A A at first every hour until the heat, pulse and breathing are relieved. Then alternate with the E E every two or three hours to complete the cure

Bronchitis or Common Cold.—*Known by* Cough, quickened breathing, sore throat, low spirits, dislike of food, slight discharge from the nose. Sometimes there is at first a chill, eyes and nostrils sometimes cold—at others, hot; coat rough; eyes and nose red, and rattles are heard in the wind-pipe and at the breast. A free discharge from the nose indicates an improvement.

Give—Specific A A and specific E E, a dose every three hours. Keep the patient housed and comfortably clothed cold relieved.

Sore Throat or Quinsy.—Often appears in connection with cold or bronchitis, or may be isolated.

Known by—Difficulty of swallowing, he quids his food, partly eats and drops it; refuses to drink, musses about in the water or swallows with reluctance and pain; the throat is hot, painful, swelled on the outside. *Often* the glands under the jaw and below the ears are swelled. In bad cases there is difficult breathing—always fever.

Give—First, specific A A; a dose every two hours. After three doses give the C C in alternation with the A A every three hours.

Inflammation of the Lungs or Pleura (*Pleurisy*).—*Comes on* from neglected colds, coughs and sudden changes, neglect of blankets or other comforts, being hard ridden in cold, bleak or snowy weather, loitering in bleak places with insufficient covering.

Known by—A hard *shaking chill*, followed by a hot, dry mouth, white-coated tongue, red nose and eyes, hard quick wiry pulse. Taking the air into the lungs, is short, sharp or cut off by the pain; forcing the air *from the lungs*, is full and slow. Cough at surface, the side sensitive if pressed upon, skin of the worst side corrugated and twitches occasionally. If pleurisy the breathing is heavy grunts and tries to get easy. The *legs, ears* and skin are cold at first, and afterwards become very hot, except *the legs, which remain very cold*. Later, the breathing is more difficult, and may be short, quick and *grunting*, the nose and neck hold out; fore legs fixed and spread apart, *legs and ears very cold*; breath quick and hot; pulse small and weak, eyes and nose look reddened, skin and chammy, etc. (For Auscultory signs, see "Humphreys' Veterinary Manual.")

Give—The specific A A every hour at first, then every two hours, by the first twenty-four hours, and the cough gives way to the A A in alternation with the E E every three hours for the next four days. After the fever is low, and cough and breathing relieved, a dose of F E four times a day with good care will complete the cure. *Never neglect pneumonia, and make an application except to rer wet and flannel bandage the legs.*

Heaves — Whistling — Broken Wind — Thick Wind.—Usually the result of badly cured Pneumonia or Bronchitis, or of neglected cold.

Known by—Whistling, roaring, hard breathing, panting and undue heaving of the flanks in exercise, travel, or work.

Give—Specific F E, at first every hour, and of specific A A each morning this cases, A A morning and F E at noon and night, with no chaff, hay or bloating feed. Light drink until work is over.

Congestion of the Head.—Often caused by overfeeding, sudden failure of the stomach, or weakness.

Known by—At first heat of the head, red injected eyes or eyes half shut, dullness, depression, inattention, sleepy or dazed, uneasy gait, heavy step, cause the feet to be lifted with a wash in moving, as it can scarcely go back at all. Later, more dull and insensible, the eyes glassy or dull, pupils small and sinking, plunges the food in the water pail. Yet later, the eye sees without moving, becomes blind, pupils large, pulse slow, respiration, sighing, tongue foul, mouth dry and tainted.

Give—Specific A A, and repeat every one of the cases. Then give the J K for the stomach, with light, soft feed. If the previous attacks give the A A each morning and the J K at night.

Fits, Convulsions or Staggers.—Are often simply the result of indigestion, sometimes worms.

Give—Specific A A at first, and repeat two or three times at the first sign of fits, and one or two hours, or more later. Then alternate the specific A A and the J K at longer intervals to prevent future attacks.

Distemper or Strengles.—Occurs in young horses.

Known by—Pulse quick; mouth hot, dry, tongue foul; Glands under the jaw swelled; hot, and sometimes breathing very difficult. Swelling under the jaws becomes larger, unsteady, but not matter down. *Give*—Specific A A four times per day

Inflammation of the Brain. Mostly met with in entire horses, in high condition, or may arise from blows or injuries to the head.

Known by—At first the horse is dull, sopid and sleepy, succeeded by a state of frenzy. Pulse and breath quick, nose and eyes red and wild tostrils wide, feet stamp, rearing, plunging, with great violence. Then convulsion, foaming, staggering, panting, sweating.

Give—Specific A A, a dose every two or three hours, and afterwards the alternation of A A and the J K, one dose four times per day.

Epilepsy.—When horses are subject to FITS OR EPILEPTIC FITS, OR STAGGERS, comejr on from time to time, give the specific A A one morning, and the J K the next, and so on.

Effects of Fear, Fright, or Excitement, or being Over-heated, *or strained too long and large.* And—Always give the A A, one or more doses, to prevent any evil effects.

Spinal Meningitis.—Is often of an epizootic character, prevailing in certain cities and localities at certain periods.

Known by—At first dullness, head hung low, inflamed eyes, pupils small, eyes staring, head lowered, neck and pain, especially on turning; tenderness and shrinking on pressure on some portion of the spine; want of firmness in standing, and swaying or tottering in walking; easily pushed over. Then back gives out; unable to rise; no strength in hind legs, paralyzed, expectant partial eyes; softer ing hock, scanty urine, dry dung.

Give—From the first and throughout, specific A A every hour, and after eight hours, once in two hours. If the water is very scanty, passed with difficulty and suppressed, alternate the H H with the A A every three hours, as some anatomists until that difficulty is relieved. Later, after the heat and fever have mostly gone, and there remain some weakness or partial paralysis of the hind legs, give the specific F E either alone or in alternation with the A A, until entire recovery, once in four hours.

Paralysis.—Caused by loss of nervous power; consequence of injuries, severe cold, or some internal cause.

Known by—Loss of power over the muscles involved. If in the face, the lips hang down and seem swelled, food is picked up with difficulty, drops from the mouth, and mastication is imperfect. When the hind parts are paralysed, the horse cannot stand, sits on the haunches like a dog, constipation and suppressed urine are apt to be present.

Give—At first specific A A once in four hours; then alternate the A A and J K every four hours. Old cases, the J K three times per day.

Tetanus or Lock-Jaw.—Mostly the result of injury, but may come on from cold or damp, or arrest of discharges, or worms, or bad stomach.

Known by—Stiff, rigid condition of all the muscles; pain set, eyes staring, head lowered, neck stretched out; legs fixed and spread out; bowels bound, urine passed with difficulty.

Treatment—Relieve the injury if present, from irritation as far as possible, by mild relieving applications, and

Give—Specific A A, a dose every three hours. If not better in twenty-four hours alternate the J K with the A A, a dose every four hours as long as help is required. See also "Veterinary Manual" for further treatment.

Bots and Worms.—Bots are rarely troublesome, the fly merely using the intestinal track of the horse as a place for the hatching of her eggs, and roaming at its young. If troublesome, *Give*—Specific D D morning and night. For other forms of worms give specific D D morning and the J K at night.

Glanders and Farcy.—*Give*—Specific C C in all such cases four times per day. In same old cases specific I I may be given alternately with the C C.

HANDLE THE ANIMAL WITH GREAT CARE. See that no glandered matter comes in contact with a sore or cut. A badly glandered animal had better be killed than incur such danger

Diarrhœa, Purging, Scouring, Looseness.—*Comes on* from green food, sudden change of feed, excess of bits; cold draughts or water; too quick work after over-feed.

Known by—Frequent abundant discharge of dung mixed with dung; pain in belly or colic, with stamping, rolling, anxious face and cold sweat; legs and ears cold; pulse small, weak; breath quick; rapid wasting of the body

Give—Specific F F four times per day. (Generally cures.) In bad cases alternate the specific J K with the F F.

Dysentery, Bloody Flux.—May occur in horses in good condition from change of feed, overwork, or exposure from cold and wet.

Known by—Frequent passages of slimy, bad smelling passages of fatty matter like grease, more or less mixed with blood, attended with much straining and effort; hot dry mouth; legs cold; no appetite; great thirst; the horse growing weak and thin. In straining the rectum (gut) may be pushed out.

Give—Specific A A, at first two or three doses, if there is fever. Follow this with specific F F every two hours until somewhat relieved, then at longer intervals, until cured. Give boiled or steamed feed.

Inflammation of the Kidneys.—May come from the use of salt peter; long carrying a heavy rider or weight; leaping; being suddenly pulled back on the haunches; exposure to cold rain during active exercise.

Known by—Fever; pulse full, hard, quick; lateral and weak; horse looks at his flanks; stands with hind legs far apart; is willing to lie down; straddles in walking; pain in turning; back arched; shrinks if the loins are pressed upon; passes *small quantities*, with *evident effort and straining*, and is frequently *high colored or bloody* or suppressed.

Give—Specific H H every two hours. If much fever, alternate specific A A with the H H, increasing the intervals as the patient improves. The H H is usually sufficient.

Rheumatism, Stiffness and Lameness.—Quite common in old horses, in younger ones from exposure and overwork, cold and damp, or cold draughts when over-heated may produce it.

Known by—An acute attack begins with a chill; then lame and stiff all over, or the lameness confined to one leg; the joint or leg, hot, swelled, painful; pulse quicker at one time than another; breath quick; sweat breaks out; animal weak Called "Chest founder" when it attacks the fore legs, and "Loin bound" when it affects the loins; then the back is swelled and belly tucked up. Sometimes shifts from one place to another.

Give—Specific A A if there is heat or fever every three hours. After the fever is over, alternate the B B with the A A, a dose every three or four hours until restored. The hot swelled limbs should also be bathed morning and night with THE MARVEL.

Strain of the Shoulder.—*Known by*—Severe suffering; cannot extend the shoulder, drags the toe; if the leg is lifted and drawn out it *causes great pain*; if long continued, sinking of the shoulder.

Strain of the Loins.—Horse lends or lowers the quarters in walking; backs with difficulty; treds unsteadily. If severe, cannot back; flings the hind feet, and the quarters trembles.

Strain of the Haunch.—Horse halts a little; spares the affected limb; on neither trot nor gallop. If slight, scarcely limps in walking; if severe, cannot move a step.

Strain of the Tendon.—Attended with excessive lameness and inflammation of the suffering part. *Give*—Specific B B three or more times per day. Bathe the part morning and night with THE MARVEL.

Spavin, Bone Spavin, Bog Spavin, Blood Spavin.—*Known as*—A swelling, and later a bony deposit, or enlargement at the inner and lower side of the hock; sometimes at first the swelling is not easily painful, but becoming a hard, bony, unsightly tumor, only causing lumping on exertion. In some cases the horse seems tender on one of the hind legs; is a little lame on first starting. On returning stands on the toe of that limb; limps on turning round, or beginning to walk; after moving, lameness disappears, and only returns on moving after standing. This will soon be followed by the swelling. *Give*—Specific B B three or more times per day on all such cases.

Splint.—From an injury. A bony tumor comes on the inside of the fore leg below the knee. Lameness during the forming stage, though rarely afterwards. When coming on there may be fever and heat of the part with the lameness. *Give*—Specific B B four times per day. If fever and heat, alternate with the A A.

Ringbone.—An enlargement and bony deposit in consequence of a strain and inflammation. May affect one or both feet, and may be superficial or involve the deeper structures of the joint. *Give*—Specific B B three time per day and bathe with THE MARVEL.

Over-reach and Tread.—A bruise on the heel of the fore foot, caused from the toe of the hind foot. Or the fore foot cork may injure the hind foot in backing. REMOVE the crushed and torn skin and horn, and bathe the hair around the wound; bathe well with warm water and THE MARVEL. Keep it clean and protected with a roller bandage. Apply the marvel morning and night. If ulcerated, apply the Veterinary Cure Ont. *Give*—Specific H H morning and night.

Thrueh and Canker.—Inflammation of the sensible frog, secreting offensive matter from the cleft. Later, abundant discharge; horn thin, shrivelled, contracted, discharge very offensive (CANKER).

Treatment—Keep the feet dry; free from *damp and stale*. Clean the foot and cleft perfectly; smear the frog and cleft with a mixture made of half ounce blue vitriol to six ounces of tar, made into a paste. Smear the parts well night and morning, pressing a smeared rag or tow well into the cleft to keep out the dirt and wet. *Give*—Also specific I I morning and night.

Affections of the Hock, Knee or Pastern, with heat, stiffness or lameness, which may be Sprains, Wrenches, Bruises, or other similar defects. *Give*—Specific B B four times per day at first. If fever or great heat of the part, alternate the A A with the B B until the heat is allayed, then the B B three times per day.

Stifle.—Replace the part, give the animal rest, and the specific B B three times per day.

Dryness of the Joints—Crackling on moving.—Results of OVERWORK OF LAMENESS, or where the ORIGIN is UNKNOWN, *Give*—Specific B B three or more times per day.

Laminitis, Acute Founder, Inflammation of the Feet.—*Comes on* from battering the feet; too long standing; standing in snow or ice with hot feet; sudden changes.

Known by—Shaking chills, breath quick, pulse quick, and full, he shifts his feet frequently; hind feet are well under him to take the weight off the fore feet; moans and groans; lies down, unable to stand on the sore feet, which are *unusually hot and painful*. Should he choose, pare down the hoof; wrap the feet in wet cloths, renewing as they get dry. If the feet have been battered, bathe with THE MARVEL.

Give—Specific A A, at first every hour, three or four times. Then alternate specific B B with the A A, every three hours at first. After a day or two omit the A A and continue the B B four times per day.

Old Chronic Founder, with lameness and stiffness on first starting off. *Give*—Specific B B three times per day.

Quarter Crack, Sand Crack.—Dress the crack in the ordinary way, either with a drawing knife and rasped surface, or cut the cleft, which keep well cleaned and smeared with cobbler's wax to keep out dirt and wet. *Give*—Always specific J K morning and night, to cause a tougher and healthier growth of hoof. For cuts, scores, INSOULAR, SCITTLE, or UNHEALTHY HOOFS, give specific J K morning and night. It cures.

Quittor.—A deep matter opening on the coronet, leading to an abscess in the foot, caused by an injury, treads, corns, or neglect of nail.

Known by—Lameness, heat and pain, and discharge from the opening. Dress as for an over-reach or tread; inject into the puncture opening THE MARVEL full strength morning and night, and *Give*—Specific I I or other.

Prick in the Foot.—*Known by*—Heat, pain, and lameness. Remove the offending substance. Bathe the injured part with THE MARVEL. *Give*—Specific B B four or more times per day.

Grease, Grapes, Scratches.—*Known by*—Heat, swelling and soreness, disease or oil, with deep clefts or cracks in the heels. In bad cases the deep clefts are filled and surface covered with unhealthy growths (GRAPES). Apply the MARVEL as often as possible. Apply the Veterinary Cure Ont. three times per day, and *Give*—Specific H as often.

Mange.—May be dry, with small red pimples, or moist, scratching. *Known by*—Rubbing, causing uneasiness and rubbing. *Give*—Specific I I morning and night, and in bad cases apply the *Mange Lotion* for which send to the Company.

Lampas.—Swelling of the bars or gums of the mouth. *Give*—Specific B B three times per day. Soon cured.

Swelled Legs or Face, Dropsy.—*Give*—Specific H H three time per day.

Inflamed Eyes, Sore Eyes, Week Sight.—*Give*—Specific A A morning and night, and bathe the eye with one part of MARVEL to two of water.

Inflammation of the Bladder,—Usually the result of disease, salt peter, cantharides, or similar drugs, but may result from cold, especially if there is fever.

Known by—Nearly the same symptoms as inflammation of the kidneys; the horse makes frequent attempts to stale, passes only a few drops at a time; the urine may be clear or mixed mixed with mucus, or stained with blood.

Give—Specific H H and the A A if needful for fever, the same as for inflammation of the kidneys, which see.

Retention of Urine or Frequent Attempts at Stealing, with effort, straining, and but little result. *Give*—Specific H H every two hours, a dose until relieved.

Colic—Belly-Ache—Spasmodic or Flatulent Colic.—*Comes on* from flatulent, irritating food; over-feeding; colder chill or a warm skin; tumors, worms, stones, etc.

Known by—Uneasiness, pawing, stamping, kicking the belly with the hind foot; looking at the flanks, groans; falls on the ground, rolls about violently or lies on his back, which gives ease for the moment. Later, throws himself about wildly, grinds his teeth, bites the manger, looks at his flanks with wild anxious expression. The pain come in paroxysms easier for a moment, then worse, finally no free interval. Inflammation may set in, legs and ears become cold, pulse small and wiry, and the animal sinks. If the bowels are involved there is *frequent desire, or attempt to stale, with little discharge.*

Give—Specific F F, a dose every fifteen minutes. If better, give not so often, but wait or give at longer intervals. If after four doses no help is not decided, give specific A A, two doses, one hour apart, especially as if there is fever, heat or quick pulse, and so continue the use of A A and F F in alternation until quite relieved; then a dose or two of J K for indigestion will complete the cure.

If, however, the KIDNEYS are involved, know so by stamping and frequent attempts to stale, give specific H H (instead of the F F) in alternation with A A, a dose every half-hour or hour

Drum Belly or Tympanites.—A form of colic, known by an enormous distention of the barrel by wind, violent pain, and frantic actions of the animal.

Give—Specific F F every ten or fifteen minutes until relieved.

Crib Biting.—Take away the manger, feed from a bucket, and *Give*—J K morning and night.

Inflammation of the Bowels. —Red Colic, Enteritis.—There are two forms of this disease, one attended by bound bowels, the other by purging.—*Comes on* from a sudden cold or a warm skin, cold drink when very hot, long and severe work on over-feed, and especially a colic badly treated and drugged with all sorts of medicines.

Known by—Dull eyes, staring coat, restless moving, pulse and breath quick; may begin with colic or with shivering; paws, kicks, rolls about violently, strains, tries to stale, passes but a few drops; pain constant, *worse by pressure or moving* about; belly hot, tucked up, unless there is wind. If there will be swelled; muzzle moist, with small dry hard ding, or purging of small frequent bloody stools; legs and ears intensely cold; pulse small and hard. Later, sweat all over, pulse smaller, weaker, imperceptible; breathing quick, irregular, sighing, wakness, trembling, falling sight, and death.

Give—From the first and all along specific A A, a dose every half-hour, afterwards every hour. If there is purging of bloody dung alternate the F F with the A A at the same intervals, but GIVE NOTHING FOR CURATIVE PURPOSES. After the inflammation has subsided under the A A and the F F, a dose or two of specific J K will bring that around all right.

Loss of Appetite, Indigestion, Constipation, Unthriftiness, Hide Bound.—Usually the result of want of proper care and food, may result from worms or internal disease. *Give*—Specific J K morning and night with soft feed and bewell.

Bloody Urine.—*Give*—Specific H H three times per day. If quite profuse, give a large spoonful of THE MARVEL on the tongue every two hours also.

Recommended by the U. S. Army Board of Cavalry Equipment, and used in the United States Army.

1 Muzzle
2 Place of Pimple from Teeth
3 Throttle, Throapt
4 Jaw
5 Shoulder-point, point of Shoulder
6 Point of Elbow
7 Arm
8 Fore-Thigh
9 Fore-Arm
10 Knee
11 Shank
12 Pastern
13 Coronet
14 Hoof
15 Point of Buttock
16 Croup
17 Back
18 Loins
19 Flank
20 Belly
21 Stifle
22 Gaskin
23 Hock
24 Point of the Hock
25 Shank
26 Coronet
27 Fetlock, or pastern Joint
28 Coronet
29 Heel
30 Contracted Heel
31 Quarters
32 Back-sinews
33 Ribs
34 Barrel
35 Side
36 Navel
37 Sheath or Prepuce
38 Stifle
39 Gas skin, or lower Thigh
40 Rump
41 Rat-tail
42 Point of the Buttock
43 Point of the Hock
44 Tail
45 Point of the Croup
46 Top of the Shoulder
47 Withers
48 Mane
49 Crest
50 Top of the Neck or Tail
51 Hip-joint—Round
52 Thick
53 Place of Spavin
54 Curb
55 Place of Splint, or sidebone
56 Place of Ringbone
57 Place of Thrush
58 Sole
59 Heel
60 Toe
61 Bars
62 Frog
63 Point of Shoulder
64 Place of Quitter
65 Place of Scratches
66 Fetlock
67 Pastern
68 Hoof
69 Coronet
70 Quarter
71 Point of Hip
72 Flank
73 Belly
74 Girth
75 Fore-Arm
76 Knee
77 Shank
78 Pastern
79 Coronet
80 Hoof
81 Point of Elbow
82 Chest
83 Point of Shoulder
84 Throat
85 Jaw
86 Angle of Jaw
87 Cheek
88 Face
89 Forehead
90 Poll
91 Ear
92 Eye
93 Temple
94 Crest
95 Withers
96 Mane
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98 Point of Withers
99 Back
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104 Rump
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863 Stifle
864 Point of Croup
865 Flank
866 Belly
867 Girth

HUMPHREYS'
Veterinary Stable Case.

Medicator in
Position as it is used.

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